

Subject Index

A

ABDOMEN

cavity, islets grafted into testis placed in streptozotocin-diabetic rats, 405-406

ACARBOSE

effects on glycemia and sucrose absorption in nondiabetics, 207-212

ACETYL CoA CARBOXYLASE

-induced hyperinsulinemia in rats, 446, 448

ACID

aminoisobutyric
insulin stimulation of uptake of, 1039-1043
arachidonic, see Arachidonic acid
-ethanol extracts of fetal bovine pancreas
 β -endorphin-like immunoreactivity in, 235-238

ADIPOCYTES

2-deoxy-D-glucose uptake by
induced hyperinsulinemia in rats and, 445-446, 447
function in young B-cell-deficient rats with near-normoglycemia, 170-175
glucose transport
 β -hydroxybutyrate and insulin sensitivity of, 1045-1050
insulin-binding
glyburide therapy in non-insulin-dependent diabetics and, 348
isolated rat
biosynthetic human proinsulin activity in, 1062-1067
2-deoxy-D-glucose uptake by, induced hyperinsulinemia and, 445-446
insulin-induced internalization of insulin receptor in, 13-17
from normal and streptozotocin-diabetic rats, 258-264

ADIPOSE TISSUE. See also Adipocytes human

influence of thyroid hormone level on, 369-374

rat

measurement of insulin dose-response in, 153-158
phospholipid metabolism
insulin mechanism of action on, 648-655

ADOLESCENTS

insulin-dependent diabetic
thyroid function and prolactin levels in, 522-525
newly diagnosed, remissions in, 994-1001

ADRENORECEPTORS

rat islet
effects of tolbutamide and glyburide on, 499-503

AGE

and influence of diabetes and glycemic control on growth hormone and insulin-like growth factors, 1175-1178
and insulin-dependent diabetes morbidity and mortality study in Pittsburgh, 271-276
of insulin-resistant diabetics in continuous subcutaneous insulin infusion study, 832-833
and maturation of insulin stimulus-secretion coupling during culture of fetal rat islets, 1028-1037
of non-insulin-dependent diabetics in glucose metabolism and glyburide study, 838-845

AGING

of collagen
nonenzymatic glycosylation and browning study of, 57-59
dehydroepiandrosterone therapy in mice and genetic background and effects of, 26-31
gastric inhibitory polypeptide and glucose-stimulated insulin release and, 950-956
islet cell cytoplasmic antibodies in *Macaca nigra* and, 219-223
red and white cell calmodulin levels and, 77-79

ALDOSE REDUCTASE

localization in human eye, 562-566

ALDOSE REDUCTASE INHIBITORS

sorbitol
inhibition of red blood cell sorbitol in insulin-dependent diabetics and, 45-49
and prevention and reversal of defective axonal transport and motor nerve conduction velocity in streptozotocin diabetic rats, 470-475

ALLOGRAFTS. See also Transplantation

canine islet cell
renal subcapsular region as site for, 910-914

ALLOXAN

concanavalin A and
interactions on glucose-induced insulin secretion and biosynthesis from rat islets of Langerhans, 164-169
-induced free radical production in isolated cells, selective effect on islet cells, 1008-1011
-induced free radical production in rat pancreatic islets
chemiluminescence as index of, 160-163
mouse islet β -cells and
nicotinamide and, 937-942

ALLOXAN DIABETES

in dogs
platelet aggregation in, 846-849
in pregnant rabbits
serum somatomedin-C concentrations in, 590-594
in rats
protein phosphatase-1 and -2A activities in heart, liver, and skeletal muscle extracts from, 576-578

AMERICAN DIABETES ASSOCIATION

Abstract deadline 1985, 916, 1018, 1125, 1204
Dates to Remember, 1, xxi; 3, xxv; 203, 408, 504, 916, 1018, 1125, 1204
Feasibility Grant Program, 1018, 1125, 1203
New Members, 1, xxi; 3, xxv; 7, xxxix; 203, 407-408, 504, 608, 810, 915, 1017-1018, 1124, 1203

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

This index covers all reading matter in Volume 33 of Diabetes except the abstracts of papers presented at the 44th Annual Meeting of the American Diabetes Association.

SUBJECT INDEX 1984

Nominations for Lilly Award for 1984, 1018, 1124, 1203
 Obituaries, 608, 1017
 Organization Section, **1**, xxi; **3**, xxv; **7**, xxxix; 203, 407-408, 504, 608-609, 810-811, 915-916, 1017-1018, 1124-1125, 1203-1204
 Research and Development Award, 1018, 1124
 Reviewers of Manuscripts, 204-206

AMINO ACIDS

-induced insulin release
 stimulus-secretion coupling of, 464-468

AMINOISOBUTYRIC ACID

uptake
 insulin stimulation of, 1039-1043

ANABOLIC-CATABOLIC CYCLE

glycogen and ketones and, 1188-1198

ANDROGEN

altered responses to
 in diabetic male rats, 819-823

ANIMAL MODELS. See under specific animals, i.e., Mice; Rats

ANTIBODIES

anti-insulin receptor
 insulin binding in rat hepatoma cells and, 481-482
 visualization of insulin receptor by immunoblotting and, 923-928
 anti-islet
 induction of streptozotocin diabetes in mice and, 106-107
 complement-fixing islet cell
 in spontaneously diabetic BB rat, 93-95
 to human aldose reductase
 localization in human eye, 562-566
 immunoglobulin G
 reticulophagocytic function in insulin-treated diabetes and, 813-818
 to insulin receptor
 in serum from insulin-resistant and hypoglycemic patient, 301-303
 islet cell
 detection by immunohistochemistry and immunofluorescence, 709-711
 pre-type 1 diabetes and, 717-719
 T-cell studies of insulin-dependent diabetes and, 319-323
 islet cell cytoplasmic
 in *Macaca nigra*, 219-223
 islet cell cytotoxic
 in insulin-dependent diabetic children, 224-228

monoclonal
 human proinsulin-specific antigenic determinants identified by, 1012-1015
 monoclonal anti-insulin
 insulin binding to receptor and, 778-784
 response to insulin therapy
 study in HLA-typed insulin-dependent diabetics, 966-969

ANTIGENS

human proinsulin-specific determinants identified by monoclonal antibodies, 1012-1015
 islet cell, isolation of T-lymphocyte lines from spontaneously diabetic rats with specificity for, 801-803
 Tac⁺-activated T-cells from insulin-dependent diabetics, 319-323

ANTITHROMBIN III

activity, heparin-catalyzed in humans
 inhibition by nonenzymatic glycosylation, 532-534

ARACHIDONIC ACID

endogenous metabolites
 insulin and glucagon release from isolated perfused rat pancreas and, 929-935
 lipoxygenase-derived metabolites
 effects on glucose-induced insulin secretion, 119-123
 platelet vitamin E and thromboxane synthesis in insulin-dependent diabetics and, 239-243

ARGININE

differential sensitivity to
 in early, type 1 diabetic children, 516-520
 glucagon response to, in insulin-dependent diabetics
 pancreatic alpha cell autoantibodies and, 435-437
 and insulin, glucagon, and prostaglandin E2 release from isolated perfused rat pancreas, 931-932
 response in physical training and/or diet therapy study in non-insulin-dependent diabetics with glucose intolerance, 312, 314-318
 in streptozotocin-diabetic rats
 glucose regulation of insulin secretion and, 669-670

ARTIFICIAL PANCREAS

closed-loop wearable, 1200-1202

L-ASPARAGINE

pancreatic islets response to, 464-468

ASPIRIN

nonenzymatic glycosylation and thermal stability of collagen in streptozotocin-diabetic rats and, 745-750

ATROPINE

intestinal transit time and fructose absorption in perfused human jejunum and, 548-550

AUDITORY-EVOKED POTENTIAL

reduced central conduction velocity in diabetics and, 627-633

AUSTRALIAN ABORIGINES

carbohydrate and lipid metabolism
 study after reversion to traditional lifestyle, 596-603

AUTOANTIBODIES

insulin receptors
 detection of, 1051-1054
 pancreatic alpha cell in insulin-dependent diabetics
 glucagon response to arginine and, 435-437

AUTOIMMUNE DISEASE

and specific class II histocompatibility gene polymorphism in BB rats, 700-703
 and visualization of insulin receptor by immunoblotting, 923, 928

AUTOIMMUNE SYSTEM

induction of streptozotocin diabetes in mice and, 105-110

AUTOIMMUNITY

total lymphoid irradiation and prevention of diabetes in susceptible rats and, 543-546

AUTORADIOGRAPHY

onset and progression of pancreatic insulinitis in overt spontaneously diabetic young adult BB rat and, 33-36
 and phosphorylation of insulin receptors from rat skeletal muscle, 706-707

B

BASEMENT MEMBRANES

rat glomerular
 effect of streptozotocin diabetes on metabolism of, 8-11
 thickening
 dermal nerve tissue from diabetics and, 244-249

January, 1-104
 February, 105-206
 March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
 April, 305-408
 May, 409-504
 June, 505-609
 July, 611-706
 August, 709-811
 September, 813-916

October, 917-1018
 November, 1019-1125
 December, 1127-1231

SUBJECT INDEX 1984

BLOOD

- erythrocytes
 - insulin binding to, evaluation of insulin resistance and, 455-459
 - reticulophagocytic function study in insulin-dependent diabetes, 813-818
- hexose levels
 - galactosemia and diabetic retinopathy in dogs and, 97-100
- human red and white cells
 - effects of aging and diabetes on calmodulin levels of, 77-79
- peripheral white cell counts
 - in diabetic dogs, 137-138
- platelets
 - aggregation in alloxan diabetic and galactosemic dogs, 846-849
 - diabetes and galactosemia in dogs and, 846-849
 - vitamin E, thromboxane synthesis in insulin-dependent diabetes and, 239-243
- red and white cell calmodulin levels
 - aging and diabetes and, 77-79
- red cell sorbitol
 - inhibition by sorbinil in diabetics, polyol pathway activity and, 45-49
- samples
 - from spontaneously diabetic BB rats complement-fixing islet-cell antibodies in, 93-95
 - from streptozotocin-diabetic monkeys with early lesions of microangiopathy, 416-417
- T-cells from insulin-dependent diabetics
 - culture and phenotype of, 319-323

BLOOD GLUCOSE

- control
 - effects on glucose counterregulation, 394-399
- physical training and, 853-854
- sorbinil inhibition of sorbitol levels in insulin-dependent diabetics and, 45-49

BLOTTING TECHNIQUES. See Immunoblotting

BODY

- anthropometric measurements
 - in diabetes prevalence study in Mexican Americans, 86-91
- perfused mouse hindquarter
 - muscle protein turnover in lean and genetically obese-diabetic mice, 1160-1164

BONES

- formation in streptozotocin-diabetic rats, 825-830

BRAIN

- absence of insulin effects in rats, 147-148, 150-151
- cerebellum
 - immunohistochemically detectable vitamin D-dependent calcium binding protein in diabetics, 917-921
- hypoglycemic injury in rats, 1090-1097
- impaired auditory brainstem-evoked responses in insulin-dependent diabetics, 1085-1089
- reduced conduction velocity in diabetics
 - functional correlates of, 627-633

BRAINSTEM AUDITORY-EVOKED RESPONSE (BAER)

- functional correlates in diabetics, 627-633

p-BROMOPHENACYL BROMIDE

- insulin, glucagon, and prostaglandin E release from isolated perfused rat pancreas and, 932

2-BROMOSTEARATE

- glucose phosphorylation and insulin secretion in rat islets of Langerhans during fasting and, 858-862

C

CALCIUM

- binding protein
 - vitamin D-dependent immunohistochemical detection in cerebellum of diabetics, 917-921
- deprivation-induced glucagon release
 - glibenclamide and glucose and, 505-509
- insulin and renal reabsorption of, 991-993
- of rat pancreatic islet B-cell granules
 - glucose-induced changes, uptake, and total, 409-413
- thiol-dependent and non-thiol-dependent insulin release and, 251-257
- uptake by rat liver plasma membrane
 - effect of streptozotocin diabetes on, 1072-1076

CALMODULIN

- human red and white cell levels
 - effects of aging and diabetes on, 77-79
- sites of action in exocytotic hormone release, 339-344

CALORIES

- intake
 - carbohydrate malabsorption and, 212

CAPILLARIES

- muscle, formation in insulin-dependent diabetics
 - physical training and, 851-857
- retinal, pericyte protein and collagen synthesis in culture
 - high-glucose concentration and, 785-788

CARBOHYDRATE METABOLISM

- in diabetic aborigines, lifestyle and, 596-603
- effects of biosynthetic human proinsulin on, 762-769
- in glucose intolerant non-insulin-dependent diabetics
 - effects of physical training and diet therapy on, 311-318
- hepatic
 - sulfonylurea effects in cultured rat hepatocytes and, 285-289

CARBOHYDRATES

- dietary
 - and suppression of hepatic glucose-6-phosphatase in rats, 192-195
- free, high-protein diets in rats
 - streptozotocin effects and, 383-388
- malabsorption
 - calorie intake and, 212
 - mechanism of action of insulin on phospholipid metabolism in rat adipose tissue and, 648-655
- sucrose absorption and glycemia
 - effects of acarbose in nondiabetics on, 201-212
- and thiol-dependent and non-thiol-dependent insulin release from isolated rat islets, 251-257

CARNITINE

- hepatic
 - ketogenesis and, 1191-1193

CARNITINE PALMITOYLTRANSFERASE

- fatty acid oxidation and ketogenesis and, 1189-1191

CASE REPORT

- severe insulin resistance and chloroquine-induced inhibition of insulin degradation, 1133-1136

CATABOLISM

- low-density lipoproteins
 - glucosylation and, 130-133

CATALASE

- pretreatment
 - alloxan-induced chemiluminescence in rat pancreas and, 161

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

CATARACTS

lens sorbitol and fructose levels and, 45
polyol pathway activity in rabbit ocular
lens and, 196-199

CELLS

detection of autoantibodies against insulin receptors inhibiting internalization of insulin into, 1051-1054
endothelial
insulin and response to wounding in monolayers of, 1099-1104
fibronectin binding to matrix components
nonenzymatic glycosylation and inhibition of, 970-973
hybridization
establishment of glucagon-producing cells by, 879-886
rat hepatocytes, red cells, and islets
alloxan-induced free radical production in, 1008-1011
rat hepatoma
insulin receptor regulation and desensitization in, 477-484
insulin regulation of sodium/potassium pump in, 428-434
rat hepatoma insulin receptors
visualization by immunoblotting, 923-928
rat parotid glands
immunochemical studies of insulin-like material in, 661-666
rat tumor and islet
insulin biosynthesis, storage and secretion in, 556-560
spleen
transfer from streptozotocin-diabetic mice into normal mice, 771-776
T-lymphocyte lines with specificity for islet cell antigens
isolation from spontaneously diabetic rats, 801-803

CEREBELLUM

vitamin D-dependent calcium-binding protein in diabetics
immunohistochemical detection of, 917-921

CHEMILUMINESCENCE

and alloxan-induced free radical production in isolated rat cells, 1008-1011
as index of drug-induced free radical production in pancreatic islets, 160-163

CHLOROQUINE

insulin studies in rat hepatocytes and, 357-358
therapy
severe insulin resistance and, 1133-1136

CHOLESTEROL

low-density lipoprotein
insulin degradation of, 333-338

CHOLINE ACETYLTRANSFERASE

accumulation in streptozotocin-diabetic rats
sorbitol treatment and, 470, 472, 474-475

CHROMATOGRAPHY

boronate affinity
glycosylated hemoglobin quantitation with, 73-76
column
of fetal bovine pancreas extracts, 235-238
gel filtration
of immunoreactive insulin in fetal rat, 51
of pancreatic glucagon levels in obesity, 277-280
ion-exchange
immunoreactive insulin in fetal rat, 51-52
ion-exchange and boronate affinity
glycosylated hemoglobin quantitation with, 73-76

CHROMIUM

release from islet cells of diabetic dogs, 138

CHROMOSOMES

analysis of glucagon-producing hamster hybrid cells, 883
location of human glucagon gene on chromosome 2, 200-202

COLLAGEN

aging in vitro by nonenzymatic glycosylation and browning
in rat tendon fibers, 57-59
platelet vitamin E and thromboxane synthesis in insulin-dependent diabetics and, 239-243
retinal capillary pericyte synthesis in culture
glucose concentration and, 785-788
thermal stability in streptozotocin-diabetic rats
effect of salicylates on, 745-750

COLLAGENASE

and isolation of islets of Langerhans from human pancreas, 1055-1060

COMA

in sand rats, 438

COMPLEMENT

-fixing islet cell antibodies
in spontaneously diabetic BB rat, 93-95

CONCANAVALIN A

alloxan and
interactions with glucose-induced insulin secretion and biosynthesis from rat islets of Langerhans, 164-169

CORTISOL

glucose counterregulation in insulin-dependent diabetics and, 732-736

CUSHING'S DISEASE

insulin resistance in
insulin binding to erythrocytes and evaluation of, 455-459

CYCLIC AMP

and glucagon binding to liver membranes of tumor-bearing hypophysectomized rats, 981
sites of action in exocytotic hormone release, 339-344

CYCLOHEXAMIDE

insulin action on phospholipid metabolism in rat adipose tissue and, 648-655

CYPROHEPTADINE

treatment of pregnant rats with endocrine pancreas function in neonatal rats and, 572-575

CYSTEAMINE

pancreatic somatostatin depletion in rats and
insulin secretion and, 510-515

D

DAWN PHENOMENON

in nondiabetics, 1150-1153

DEHYDROEPIANDROSTERONE THERAPY

in diabetes-obesity mutants and aged normal mice
effect of genetic background on effects of, 26-31

2-DEOXY-D-GLUCOSE

comparison of rates of glucose metabolism and insulin response among rat tissues in vivo, 141-151

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

SUBJECT INDEX 1984

measurement of insulin dose-response characteristics among individual rat muscle and adipose tissues in vivo, 153-58
transport in adipocytes
 B-hydroxybutyrate and insulin sensitivity of, 1045-1050
uptake by adipocytes from normal and streptozotocin-diabetic rats insulin and, 258-264

DIABETES MELLITUS

in Australian aborigines
 carbohydrate and lipid metabolism, lifestyle and, 596-603
calmodulin levels of human red and white cells and, 77-79
collagen aging in vitro by nonenzymatic glycosylation and browning and, 57-59
complications
 localization of aldose reductase in human eye and, 562-566
 sorbitol and, 45-49
control
 artificial endocrine pancreas for, 1200-1202
dermal nerve studies and, 244-249
early type I in children
 differential sensitivity to β -cell secretagogues and, 516-520
effects on red and white cell calmodulin levels, 77-79
etiology
 autoimmune mechanisms and, 105
fibrin deposition in
 nonenzymatic glycosylation and, 532-534
in genetically obese mice
 genetic control of pathogenesis of, 1068-1071
glomerular polyol accumulation in sorbinil and prevention of, 604-606
glycosylation of low-density lipoproteins and plasma low-density lipoproteins in, 130-133
infertility and
 preovulatory luteinizing hormone surge in streptozotocin-diabetic rats and, 324-326
insulin-dependent
 antibody response to insulin therapy in, 966-969
 in BB rats, histocompatibility gene polymorphism and, 700-703
 circulating immune complement and platelet thromboxane synthesis in, 728-731
 continuous subcutaneous insulin infusion in, 832-836
 culture and phenotyping of activated T-cells in, 319-323
 detection of antibody to pancreatic islet cells in, 709-711

effects of changes in glycemic control on, 394-399
functional correlates of reduced nerve conduction velocity in, 627-633
genetic study of, 958-964
glucose counterregulation in, compared with post-pancreatectomy patients, 1112-1118
glucose counterregulation test in, 732-736
glycemic control and serum insulin-like growth factors in, 790-793
impaired auditory brainstem-evoked responses in, 1085-1089
increased insulin need for breakfast in, 266-269
influence of physical training on muscle capillary formation in, 851-857
insulin clearance and sensitivity and prebreakfast insulin requirements in, 60-63
insulin-like growth factors in young patients in, 1175-1178
interleukin-2 synthesis in, 552-555
morbidity and mortality study in Pittsburgh, 271-276
pancreatic alpha cell autoantibodies in, 435-437
pituitary response to growth hormone-releasing factor in, 804-806
plasma β -thromboglobulin response to insulin-induced hypoglycemia in, 907-909
platelet vitamin E and thromboxane synthesis in, 239-243
polymorphic locus near insulin gene associated with, 176-183
sorbitol inhibition of red blood cell sorbitol in, 45-49
insulin-dependent in dogs
 anti-beta-cell immunity in, 135-140
insulin resistance in
 chloroquine phosphate therapy and, 1133-1136
insulin-treated
 reticulophagocytic function in, 813-818
in *Macaca nigra*
 islet cell cytoplasmic antibodies study of, 219-223
models of
 sand rats, 438-442
newly diagnosed insulin-dependent sustained normoglycemia in, 995-1001
non-insulin-dependent
 acute and chronic effects of sulfonylurea therapy in, 346-353
 effects on insulin-stimulated glucose utilization, compared with obesity, 622-626
 effects of physical training and diet on carbohydrate metabolism in, 311-318

ethnic differences in susceptibility to, 1002-1007
glucose tolerance tests prior to onset of, 717-719
insulin-stimulated glucose disposal in, 643-647
mechanism of improvement in glucose metabolism after glyburide in, 838-845
postreceptor insulin resistance in, 450-454
role of gastric inhibitory polypeptide in, 950-956
vitamin D-dependent calcium-binding protein in cerebellum and, 917-921
non-insulin-dependent in genetically obese mice behavioral manipulation of phenotype in, 616-618
non-insulin-dependent in obese subjects
 insulin therapy in, 634-641
in partially depancreatized rats
 poly(ADP-ribose) synthetase inhibitor and, 401-403
peripheral vascular disease and regional transcutaneous oximetry and, 527-530
prevalence study in Mexican-Americans
 relationship to percent of gene pool from native Americans, 86-91
proteinuria patterns in
 diabetic nephropathy and, 686-690
in rats
 major histocompatibility complex polymorphisms in, 807-809
in sand rats
 metabolic pattern during development of, 438-442
spontaneous in rats
 complement-fixing islet cell antibodies in, 93-95
 isolation of T-lymphocyte lines with specificity for islet cell antigens from, 801-803
 pancreatic biopsy study of pancreatic insulinitis in, 33-36
 superoxide dismutase in polymorphonuclear leukocytes and, 586-588
therapy
 epicatechin-containing plants and, 291-295
total lymphoid irradiation in rats and prevention of, 543-546
variations in daily glycemic response
 artificial endocrine pancreas and, 1200-1202

DIAMIDE

thiol-dependent and non-thiol-dependent insulin release from isolated rat islets and, 251-257

DIAZOXIDE

insulin release and
 by insulinoma transplanted into rat kidney, 5-6

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

DIBUTYRYL CYCLIC AMP

and cytosolic phosphoenolpyruvate carboxykinase mRNA in rat liver, 328-332

DIET

carbohydrate and lipid metabolism in diabetic a. riginos and, 596-603
D-galactose high in dogs
diabetic-like retinopathy and, 97-100
development of diabetic syndrome in sand rats and
metabolic studies in, 438-442
fiber
glycemia following glucose loading and, 211-212
high-carbohydrate in rats
suppression of hepatic glucose-6-phosphatase and, 192-195
high-protein, carbohydrate-free in rats
streptozotocin effects and, 383-388
insulin requirements for meals
midnocturnal insulin infusion and, 266-269
therapy
carbohydrate metabolism in non-insulin-dependent diabetics and, 311-318

DIPHThERIA TOXIN

conjugated to insulin
and detection of autoantibodies
against insulin receptors, 1051-1054

DNA

alloxan damage and, 937
complementary, from Syrian hamster islets
sequencing of, 297-299
content of embryos from streptozotocin diabetic rats, 281-284
of diabetic BB rats
restriction fragment polymorphisms in, 807-809
restriction enzyme polymorphism of HLA-D region genomic
susceptibility to insulin-dependent diabetes and, 958-964
samples
location of human glucagon gene and, 200-202

DOGS

alloxan-diabetic and galactosemic
platelet aggregation study in, 846-849
depancreatized and conscious
effects of portal and peripheral venous insulin infusion on glucose production and utilization in, 984-989
experimental galactosemia and diabetic-like retinopathy in, 97-100

insulin-dependent diabetic
anti-beta-cell immunity in, 135-140
intravenous glucose tolerance tests and euglycemic glucose clamp studies in
insulin sensitivity index and, 362-368
naloxone and centrally induced hyperglycemia in, 619-621
renal subcapsular islet cell transplantation in, 910-914

DOPAMINE

analogues
inhibition of insulin release from pancreatic islets, 888-893
 β -hydroxylase activity
effect of hyperglycemia and other sugars on, 1127-1131

E**EDTA**

insulin binding and action and
in isolated rat cardiocytes, 214-217

ELECTROENCEPHALOGRAPHY

in hypoglycemic brain injury study in rats, 1090-1097

ELECTROPHORESIS

and solubilization of insulin receptors
from rat skeletal muscle, 706-707

EMBRYOS

from streptozotocin-diabetic rats
growth retardation during early organogenesis in, 281-284

 β -ENDORPHIN

and centrally induced hyperglycemia in dogs
naloxone and, 619-621
-like immunoreactivity
in fetal bovine pancreas extracts, 235-238

ENDOTHELIAL CELLS

bovine aortic
processing of insulin in culture by, 794-800
monolayers
insulin and response to wounding in, 1099-1104

ENDOTHELIUM

aortic
lipoprotein-induced insulin resistance in, 1039-1043

ENZYMES

aldose reductase
localization in human eye, 562-566
glucose-phosphorylating
fasting and 2-bromostearate and, 858-862
heme-containing in female rats
diabetes-induced metabolic alterations in, 37-43
hepatic
ketogenesis and, 1188-1193
isolated mouse pancreatic acini
degradation of insulin and, 64-71
leukocyte lysosomal
chloroquine-induced inhibition of insulin degradation and, 1133-1136
myocardial
effects of acute and chronic diabetes in rats on, 1078-1083
protein phosphatase-1 and -2A activities in heart, liver, and skeletal muscle
from normal and alloxan-diabetic rats, 576-579
restriction, polymorphism
susceptibility to insulin-dependent diabetes and, 958-964
skeletal muscle
physical training in insulin-dependent diabetics and, 851-857

EPICATECHIN

effects on rat islets of Langerhans, 291-295

EPINEPHRINE

glucose counterregulation in insulin-dependent diabetics and, 732-736
-induced insulin deficiency
ketone body kinetics and lipolysis in man and, 738-743
plasma glucose response to in genetically obese mice, 616-618

EPSTEIN-BARR VIRUS

-transformed lymphocytes from insulin-resistant patients
downregulation studies in, 421-426

ERYTHROCYTES

insulin binding to
evaluation of insulin resistance in
Cushing's disease, 455-459

ESR SPECTROMETRY

in adipocyte studies of normal and streptozotocin-diabetic rats, 250-251

ETHNICITY

susceptibility to non-insulin-dependent diabetes in two urbanized Micronesian populations, 1002-1007

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

EUGLYCEMIC GLUCOSE CLAMP STUDIES

- of acute and chronic effects of sulfonylurea therapy in non-insulin-dependent diabetics, 346-353
- of comparative relative effects of obesity and non-insulin-dependent diabetes on insulin-stimulated glucose utilization, 622-626
- compared with glucose tolerance tests in dogs
 - correlation of insulin sensitivity index and, 362-368
- of effects of biosynthetic human proinsulin on carbohydrate metabolism, 762-769
- of effects of chronic beta receptor stimulation on glucose metabolism, 1144-1148
- of glucose metabolism improvement after chronic glyburide therapy in non-insulin-dependent diabetics, 838-845
- indirect calorimetry and
 - in physical training vs. diet study in glucose-intolerant non-insulin-dependent diabetics, 311-318
- of insulin effect during continuous subcutaneous insulin infusion in insulin-dependent diabetics, 832-836
- of insulin effect on fat-induced gastric inhibitory polypeptide, 580-584
- of insulin stimulation of low-density lipoprotein degradation, 333-338
- of mechanism of improvement in glucose metabolism in non-insulin-dependent diabetic after glyburide therapy, 838-845
- in normal man
 - and similar metabolic effects of pulsatile vs. continuous insulin delivery, 1169-1173
- of obese subjects with insulin resistance, 305-309
- of relationship between insulin-stimulated glucose utilization and plasma insulin response to oral glucose in normals, 460-463
- of roles of insulin clearance and insulin sensitivity in prebreakfast increase in insulin requirements, 60-63

EXERCISE. See also Physical training
carbohydrate and lipid metabolism in diabetic aborigines and, 596-603

EYES

- aldose reductase localization in, 562-566
- ocular lens polyol pathway activity
- direct measurement method, 196-199

F

FASTING

- and refeeding in rats
 - onset of liver glycogen synthesis and, 944-948
- glucose-phosphorylating activities and insulin secretion in rat islets of Langerhans and, 2-bromostearate and, 858-862
- glycogen and ketones and, 1188-1198

FAT

- induced gastric inhibitory polypeptide release
 - hyperinsulinemia and prevention of, 580-584
- tissue, rat
 - glucose metabolism and insulin responses of, 148

FATTY ACIDS

- oxidation
 - 2-bromostearate effects in fasting rats and, 858-862
 - primary regulatory site for, 1189-1191
- synthetase
 - induced hyperinsulinemia in rats and, 446, 448

FEET

- diabetic
 - assessment of perfusion in, 527-531

FETUS

- bovine pancreas extracts
 - β -endorphin-like immunoreactivity in, 235-238
- cryopreserved mouse islets
 - syngeneic transplantation of, 975-977
- glycosylated hemoglobin, correlation with hyperglycemia and birth weight of infants of diabetic mothers, 81-85
- human pancreatic explants
 - transplantation into nude mice, histologic differentiation of, 1180-1186
- human pancreatic tissue fragments
 - long-term culturing method for, 1165-1168
- isolated rat hepatocytes
 - insulin binding and action in, 864-870
- mouse pancreas
 - effect of ischemia and temperature on insulin production by, 376-381
- rabbit, from diabetic pregnancy
 - serum glucose, insulin, and somatomedin-C in, 593
- rat
 - circulating immunoreactive insulin in, 50-55

rat islets

- differential effects of age vs. glycemic stimulation on insulin stimulus-secretion coupling during culture, 1028-1037

FIBER

- dietary
 - glycemia following glucose loading and, 211-212

FIBRIN

- deposition in diabetics
 - nonenzymatic glycosylation and, 532-534

FIBROBLASTS

- cultured human
 - activation of pyruvate dehydrogenase complex by porcine and biosynthetic human insulin in, 681-684

FIBRONECTIN

- binding to matrix components
 - nonenzymatic glycosylation inhibition of, 970-973
- diabetic retinopathy and nephropathy and, 125-128

FLAVONOIDS

- epicatechin
 - effects on rat islets of Langerhans, 291-295

FLURBIPROFEN

- insulin, glucagon, and prostaglandin E release from isolated rat pancreas, 933

FOOD. See also Diet

- intake
 - induced hyperinsulinemia in rats and, 447

FREE RADICALS

- alloxan-induced production in isolated cells
 - selective effect on islet cells, 1008-1011
- alloxan and streptozotocin induction in rat pancreatic islets
 - chemiluminescence as index of, 160-163

FRUCTOSE

- absorption in perfused human jejunum
 - somatostatin and atropine and, 548-550

FRUCTOSE-2,6-BISPHOSPHATE

- formation in perfused rat liver
 - tolbutamide stimulation of, 495-498
- liver concentrations
 - glycogen repletion after fasting and, 1197

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

G

GALACTOSEMIA

- in dogs
 - diabetic-like retinopathy and, 97-100
 - platelet aggregation study in, 846-849

GASTRIC INHIBITORY POLYPEPTIDE

- augmentation of insulin with, 389-393
- carbohydrate absorption and, 212
- fat-induced
 - hyperinsulinemia and prevention of insulin effect on, 580-584
- glucose-stimulated insulin release in non-insulin-dependent diabetics
 - aging and obesity and, 950-956
- insulin release in obese Zucker rats and, 536-542

GASTROINTESTINAL SYSTEM. See also

- Gastric inhibitory polypeptide
- carbohydrate absorption
 - acarbose and, 207-212
- perfused human jejunum
 - effect of somatostatin and atropine infusion on intestinal transit time and fructose absorption in, 548-550

GEL-FILTRATION ANALYSIS

- of fetal bovine pancreas extracts
 - β -endorphin-like immunoreactivity in, 235-238

GENES

- and dynamic insulin secretory response of isolated pancreatic islets of diabetic mice, 1120-1123
- human glucagon
 - location of, 200-202
- human insulin
 - abnormal products of, 693-698
 - polymorphic locus associated with in diabetics, 176-182
- native American sources
 - diabetes prevalence in Mexican-Americans and, 86-91
- preproinsulin in Syrian hamsters, 297-299
- specific class II histocompatibility polymorphism in BB rats, 700-703

GILBERTESE. See Micronesians

GLIBENCLAMIDE

- calcium deprivation-induced glucagon release and, 505-509

GLUCAGON

- binding to liver membranes of tumor-bearing and hypophysectomized rats

- insulin and growth hormone and, 978-982
- differential sensitivity to in early type I diabetic children, 516-520
- hepatic ketogenesis and, 1191
- pancreatic levels in obesity, 277-280
- producing hybrid cells, 879-886
- regulation of cytosolic phosphoenolpyruvate carboxykinase mRNA in rat liver, 328-332
- release
 - calcium deprivation-induced, glibenclamide and glucose and, 505-509
 - by insulinoma transplanted into rat kidney, 6
- release from isolated perfused rat pancreas
 - endogenous arachidonic acid metabolites and, 929-935
- response to arginine
 - pancreatic alpha cell autoantibodies in insulin-dependent diabetes and, 435-437
- response to insulin hypoglycemia in normal and streptozotocin-diabetic rats
 - role of sympathetic nervous system in, 1154-1158
- responses of insulin-dependent diabetics, 732-736

GLUCAGON GENE

- human, location on chromosome 2, 200-202

GLUCOSE

- abnormal regulation of insulin secretion in models of reduced β -cell mass, 667-672
- appearance and disappearance rates in plasma of nondiabetics
 - acarbose and sucrose loading and, 207-212
- β -cell sensitivity to in early type I diabetic children, 516, 520
- basal endogenous production
 - in physical training and diet therapy study in non-insulin-dependent, glucose intolerant diabetics, 311-318
- calcium deprivation-induced glucagon release and, 505-509
- control
 - serum insulin-like growth factors in diabetics and, 790-793
- counterregulation
 - and changes in glycemic control in insulin-dependent diabetes, 394-399
- pancreatectomy and, comparison with other forms of diabetes, 1112-1118
- counterregulation in insulin-dependent diabetes
 - glycemic control and, 394-399
 - test for, 732-736
- dependent insulinotropic polypeptide, see Gastric inhibitory polypeptide
- disappearance rates
 - in non-insulin-dependent streptozotocin-diabetic rats, 901-906
- homeostasis
 - evidence for opioid role in, 619-621
- induced insulin release
 - islet thiols and, 251-257
 - lipoxygenase-derived arachidonic acid metabolites and, 119-123
- induced insulin secretion and biosynthesis from rat islets of Langerhans
 - concanavalin A and alloxan and, 164-169
- insulin kinetics
 - bioartificial pancreas and, 752-760
- insulin secretion and
 - insulinomas transplanted into rat kidney and, 5
- insulin-stimulated disposal of
 - in non-insulin-dependent diabetics, 643-647
- insulin-stimulated utilization in normal subjects
 - relationship to plasma insulin response to oral glucose, 460-463
- intravenous, response in physical training vs. diet therapy
 - study in non-insulin-dependent diabetics with glucose intolerance, 312, 314
- liver phosphorylation capacity and, 1196-1197
- oral, plasma insulin response to in normal subjects
 - relationship to insulin-stimulated glucose utilization, 460-463
- oral loading in healthy man, effect of growth hormone on
 - splanchnic glucose and substrate metabolism after, 19-24
- phosphorylating activities
 - 2-bromostearate in rats and, 858-862
- pituitary response to growth hormone-releasing factor in diabetes and, 804-806
- polyol pathway activity in ocular lens and, 196-199
- production and utilization in depancreatized conscious dogs
 - portal and peripheral venous insulin infusion and, 984-989
- rat pancreatic islet β -cell calcium uptake and, 409-413
- splanchnic
 - effect of growth hormone after oral glucose in healthy humans, 19-24

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

-stimulated insulin secretion by neonatal rat pancreatic islet cells
sodium salicylate and, 872-878
stimulation and maturation of insulin stimulus-secretion coupling during culture of fetal rat islets, 1028-1037
stimulation of retinal capillary pericyte protein and collagen synthesis in culture, 785-788
transport by adipocytes
 β -hydroxybutyrate and insulin sensitivity of, 1045-1050
uptake, peripheral in insulin-resistant diabetics
continuous subcutaneous insulin infusion and, 832-836
uptake and clearance
evaluation of insulin action in vivo and, 184-189
utilization
comparative effects of obesity and non-insulin-dependent diabetes on, 622-626
utilization and production
dawn phenomenon in nondiabetic humans and, 1150-1153

GLUCOSE CLAMP TECHNIQUE. See Euglycemic glucose clamp studies

GLUCOSE INTOLERANCE

in neonatal rats
cyproheptadine treatment during gestation and, 572-575
in non-insulin-dependent diabetics
effects of physical training and diet therapy on carbohydrate metabolism and, 311-318

GLUCOSE METABOLISM

deoxyglucose method for comparing rates among rat tissues in vivo, 141-151
effects of chronic beta receptor stimulation in nondiabetic subjects on, 1144-1148
glycogen synthesis and, 1193-1196
mechanism of improvement after chronic glyburide therapy in non-insulin-dependent diabetics, 838-845

GLUCOSE OXIDASE

and detection of antibody to pancreatic islet cells with immunohistochemistry and immunofluorescence, 709-711

GLUCOSE TOLERANCE

in sand rats, 438-442

GLUCOSE TOLERANCE TESTS

in diabetic dogs, 137
intravenous
correlation in dogs between euglycemic clamp studies and, 362-368
renal subcapsular islet cell transplants in dogs and, 912
oral
in Cushing's disease, obesity, and normal subjects, 457
pre-type I diabetes mellitus and, 717-719

¹⁴C-GLUCOSE

incorporation into glycogen in isolated fetal rat hepatocytes, 864-870

GLUCOSE-6-PHOSPHATASE

carbohydrate feeding in rats and suppression of, 192-195
inhibition after refeeding with glucose, 1197

GLUCOSYLATION

of low-density lipoproteins
catabolism and, 130-133

GLYBURIDE

acute and chronic effects in non-insulin-dependent diabetics, 346-353
insulin-dependent glycogenesis and insulin binding in cultured rat hepatocytes and, 285-289
therapy
mechanism of glucose metabolism improvement after, 838-845
tolbutamide combined with
and displacement of α - and β -adrenergic radioligands in rat pancreatic islet cells and membranes, 499-503

GLYCEMIC CONTROL

closed-loop wearable artificial endocrine pancreas and, 1200-1202

GLYCERALDEHYDE

-induced insulin release
islet thiols and, 251-257

GLYCOGEN

and ¹⁴C-glucose incorporation in isolated fetal rat hepatocytes, 864-870
synthesis
after fasting, 1193-1198
glucose and, 1194-1197
synthesis in fasted-refed rats
effects of streptozotocin diabetes and insulin replacement on onset of, 944-948

GLYCOGEN SYNTHASE

assay in rat hematoma cells, 478

GLYCOGENESIS

insulin-dependent
cultured rat hepatocytes, sulfonylurea and, 285-289

GLYCOSAMINOGLYCANS

sulfated
and metabolism in glomerular basement membrane from streptozotocin-diabetic rats, 8-11

GLYCOSYLATED HEMOGLOBIN

fetal
correlation with hyperglycemia and birth weight in infants of diabetic mothers, 81-85
quantitation of
with boronate affinity chromatography, 73-76

GLYCOSYLATION, NONENZYMATIC. See Nonenzymatic glycosylation

GONADOTROPIN

release in male streptozotocin-diabetic rats, 819-823

GROWTH

retardation
early organogenesis in embryos of streptozotocin-diabetic rats and, 281-284

GROWTH FACTORS

serum insulin-like in diabetics
effect of glycemic control on, 790-793

GROWTH HORMONE

effect on splanchnic glucose and substrate metabolism following oral glucose loading in healthy man, 19-24
glucagon binding to liver membranes of tumor-bearing and hypophysectomized rats, 978-982
glucose counterregulation in insulin-dependent diabetics and, 732-736
levels in young insulin-dependent diabetics control and, 1175-1178
morning insulin resistance and, 269

GROWTH HORMONE-RELEASING FACTOR

and pituitary response in diabetics, 804-806

H

HAMSTERS

cell hybridization study
establishment of glucagon-producing cells, 879-886

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

HEART

- aortic endothelium
 - lipoprotein-induced insulin resistance in, 1039-1043
- bovine aortic endothelial cells in culture
 - processing of insulin by, 794-800
- extracts from control and alloxan-diabetic rats
 - protein phosphatase activities in, 576-578
- isolated rat cardiocytes
 - effect of EDTA on insulin binding and action in, 214-217
- myocardial metabolism and mechanical performance of streptozotocin-diabetic rat
 - tolbutamide and, 1138-1143
- myocardial metabolism in rats
 - acute and chronic streptozotocin-diabetic diabetes and, 1078-1083
- rat tissue
 - glucose metabolism and insulin responses in, 148

HEMOPROTEIN

- synthesis and degradation in female rats
 - diabetes-induced alterations in, 37-43

HEPARIN

- catalyzed human antithrombin III activity
 - inhibition by nonenzymatic glycosylation, 532-534

HEPATOCYTES

- alloxan-induced free radical production in
 - compared with islet cells, 1008-1011
- cultured rat
 - sulfonylurea and glycogenesis and insulin binding in, 285-289
- fetal rat
 - insulin binding and action in, 864-870
 - glucagon binding to, in tumor-bearing and hypophysectomized rats
 - insulin and growth hormone and, 978-982
- rat
 - release of immunologically active insulin fragment from, 355-360

HEPATOMA

- rat cells
 - visualization of insulin receptor by immunoblotting, 923-928

HEREDITY

- abnormal products of human insulin gene and, 693-698
- behavioral manipulation of diabetic phenotype in genetically obese mice, 616-618

- diabetes prevalence in Mexican Americans and percent of gene pool derived from native American sources, 86-91
- and differential sensitivity to β -cell secretagogues in early type I diabetes, 516-520
- human glucagon gene location, 200-202
- influence of major histocompatibility complex on pathogenesis of diabetes in mice, 1068-1071
- polymorphic locus near human insulin gene associated with insulin-dependent diabetes, 176-182
- sequence of cDNA encoding of Syrian hamster preproinsulin, 297-299
- specific class II histocompatibility gene polymorphism in BB rats, 700-703
- susceptibility of inbred mice to streptozotocin diabetes and, 567-570
- susceptibility to insulin-dependent diabetes
 - restriction enzyme polymorphism of HLA-D region genomic DNA and, 958-964
- therapeutic effects of dehydroepiandrosterone in diabetic obese mutants and aged normal mice, 26-31

- HLA COMPLEX.** See also HLA typing and pathogenesis of diabetes in genetically obese diabetic mice, 1068-1071
- susceptibility of inbred mice to streptozotocin diabetes and, 567-570
- susceptibility to insulin-dependent diabetes and, 958-964

HLA TYPING

- of insulin-dependent diabetes
 - antibody response to insulin therapy and, 966-969
- reticulophagocytic function in insulin-treated diabetes and, 813-818

HORMONES

- androgen responses in streptozotocin diabetic male rats, 819-823
- plasma levels
 - dawn phenomenon in nondiabetic humans and, 1150-1153
- polypeptide
 - secretion in rat islets, calmodulin, and cyclic AMP and, 339-344
- preovulatory luteinizing hormone surge in streptozotocin-diabetic female rats, 324-326
- thyroid
 - insulin action in human adipose tissue and, 369-374

HYDROGEN

- breath
 - sucrose malabsorption and, 207, 211

β -HYDROXYBUTYRATE

- insulin sensitivity of adipocyte glucose transport and, 1045, 1050

HYPERGLYCEMIA

- alloxan-induced in mice
 - nicotinamide and, 937-942
- control of
 - effect on serum insulin-like growth factors in diabetics, 790-793
- diabetic syndrome in sand rats and, 438-442
- effect on plasma dopamine- β -hydroxylase activity, 1127-1131
- in genetically obese mice
 - environmental stimuli and, 616-618
- induction of streptozotocin diabetes in genetically susceptible mice and, 105-110
- in infants of diabetic mothers
 - correlation with glycosylated fetal hemoglobin, 81-85
- intracerebroventricular instillation of morphine and β -endorphin-induced in dogs
 - naloxone and, 619-621
- in streptozotocin-diabetic rats
 - oral sorbinil therapy and, 45-49
- streptozotocin-induced in mice
 - immunologic studies of, 771-776

HYPERINSULINEMIA

- chronic, in fetal rhesus monkeys from diabetic mothers, 656-659
- fetal rat in late gestation
 - new form of circulating insulin and, 53-55
- induced in rats
 - increased insulin responsiveness consequent to, 444-449
- prevention of insulin effect on fat-induced gastric inhibitory polypeptide, 580-584

HYPERTHYROIDISM

- insulin action in human adipose tissue and, 369-375

HYPOGLYCEMIA

- brain injury in rats and, 1090-1097
- insulin, in normal and streptozotocin-diabetic rats
 - role of sympathetic nervous system in glucagon response to, 1154-1158
- insulin-induced in insulin-dependent diabetics
 - plasma B-thromboglobulin response to, 907-909

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

insulin resistance and
serum insulin receptor antibodies and,
301-303
in post-pancreatectomy and diabetic
patients compared, 1112-1118
pulsatile vs. continuous human insulin
delivery in normal man and,
1169-1173

HYPOPHYSECTOMY

in tumor-bearing rats
glucagon binding to liver membranes
of, 978-982

HYPOTHALAMUS

and absent or delayed preovulatory lu-
teinizing hormone surge in strep-
tozotocin-diabetic female rats,
324-326

HYPOTHYROIDISM

insulin action in human adipose tissue
and, 369-374

I

IMMUNE COMPLEXES

circulating
in insulin-dependent diabetes, 728-
731

IMMUNE SYSTEM

anti-beta-cell immunity in insulinopenic
diabetic dogs and, 135-140

IMMUNITY

anti-beta-cell
in insulinopenic diabetic dogs, 135-
140
T-cell-mediated
development of streptozotocin diabe-
tes in mice and, 894-899

IMMUNOBLOTTING

insulin receptor visualization by, 923-
928

IMMUNOCYTOCHEMISTRY

and insulin-like material in parotid gland
of rats, 661-666

IMMUNOFLUORESCENCE STUDIES

of activated T-cells from insulin-depend-
ent diabetics, 319-323
detection of antibody to pancreatic islet
cells
comparison with immunohistochemis-
try, 709-711

IMMUNOHISTOCHEMISTRY

detection of antibodies to pancreatic is-
let cells

compared with immunofluorescence,
709-711
detection of vitamin D-dependent cal-
cium-binding protein in cerebel-
lum of diabetics, 917-921
of glucagon-immunoreactive cells in
obese and lean rat pancreas,
540, 541
of glucagon-producing hybrid hamster
cells, 883
and localization of aldose reductase in
human eye, 562-566
of pancreas of partially depancreatized
rats treated with poly(ADP-ri-
bose) synthetase inhibitors, 401-
403
of pancreatic sections from cysteamine-
treated rats
glucagon, insulin, and somatostatin
content of, 513

IMMUNOLOGY

cellular basis for induction of streptozo-
tocin diabetes in animals, 771-
776
insulin receptor antibodies from serum
of insulin-resistant and hypogly-
cemic patient, 301-303
reticulophagocytic function in insulin-
treated diabetics, 813, 815
T-cell culture and phenotype from insu-
lin-dependent diabetics, 319-
323
thymic immunity and development of
streptozotocin diabetes in mice,
894, 899

INDIANS

medicinal use of epicatechin-containing
plants in diabetics, 291-295

INDIRECT CALORIMETRY

in glucose-intolerant non-insulin-depend-
ent diabetics
physical training vs. diet therapy and,
311-318

INFANTS

of diabetic mothers
chronic hyperinsulinemia in fetal mon-
keys and, 656-659
hyperglycemia and birth weight and
glycosylated fetal hemoglobin,
81-85

INFERTILITY

absent or delayed preovulatory luteiniz-
ing hormone surge in streptozo-
tocin-diabetic rats and, 324-326

INSULIN

abnormal
heredity and, 693-698

action

and phospholipid metabolism in rat
adipose tissue, 648-655
in rats with non-insulin-dependent dia-
betes, 901-906
action in human adipose tissue
thyroid hormone level and, 369-374
action and secretion
insulin therapy in obese, non-insulin-
dependent diabetics and, 634-
641
action in vivo
use of glucose uptake and clearance
for evaluation of, 184-189
adipocyte glucose transport sensitivity to
 β -hydroxybutyrate and, 1045-1050
adipocyte uptake of 2-deoxy-D-glucose
and
in normal and streptozotocin-diabetic
rats, 258-264
adsorption isotherms onto various mate-
rials
measurement of, 674-679
anabolic-catabolic cycle and, 1188-
1198
binding
by cultured rat hepatocytes, sulfonyl-
urea and, 285-289
by rat hepatoma cells, 477-484
binding and action
by isolated fetal rat hepatocytes, 864-
870
by isolated rat cardiocytes, 214-217
binding to insulin receptor
monoclonal anti-insulin antibodies
and, 778-784
binding studies
terbium as fluorescent probe for,
1106-1111
biosynthesis, compartmental storage,
and secretion
in rat tumor vs. islet cells, 556-560
deficiency, epinephrine- and somatosta-
tin-induced in man
ketone body kinetics and lipolysis
and, 738-743
degradation by isolated mouse pan-
creatic acini, 64-71
-dependent diabetes
circulating immune complexes and
platelet thromboxane synthesis
in, 728-731
continuous subcutaneous insulin infu-
sion in, 832-836
culture and phenotype of activated T-
cells from, 319-323
detection of antibody to pancreatic is-
let cells in, 709-711
effects of changes in glycemic control
on, 394-399
functional correlates of reduced cen-
tral CV in, 627-633
glucose counterregulation test in,
732-736

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

SUBJECT INDEX 1984

- glycemic control and serum insulin-like growth factors in, 790-793
impaired auditory brainstem-evoked responses in, 1085-1089
increased insulin need for breakfast in, 266-269
insulin-like growth factors in young subjects with, 1175-1178
interleukin-2 synthesis in, 552-555
morbidity and mortality study of, 271-276
newly diagnosed, sustained normoglycemia in, 995-1001
pancreatic alpha cell autoantibodies and glucagon response to arginine in, 435-437
physical training and formation of muscle capillaries in, 851-857
pituitary response to growth hormone-releasing factor in, 804-806
platelet vitamin E and thromboxane synthesis in, 239-243
polymorphic locus near insulin gene associated with, 176-182
in sand rats, 438-442
sorbitol inhibition of red blood cell sorbitol in, 45-49
susceptibility to, genetic study of, 958-964
-dependent diabetes in dogs
 anti-beta-cell immunity in, 135-140
-dependent diabetic children and adolescents
 thyroid function and prolactin levels in, 522-525
-dependent glycogenesis
 in cultured rat hepatocytes, sulfonylurea and, 285-289
-dependent juvenile diabetics
 islet-cell cytotoxic antibodies in, 224-228
dose-response characteristics among individual muscle and adipose tissues in rats, 153-158
effect on fat-induced gastric inhibitory polypeptide
 hyperinsulinemia blockade of, 580-584
endothelial cell monolayers response to wounding and, 11-14
extrapancreatic
 insulin-like material in rat parotid glands and, 661-666
glucagon binding to liver membranes of tumor-bearing and hypophysectomized rats and, 978-982
glucose-dependent insulinotropic polypeptide augmentation of, 389-393
hepatic secretion and extraction
 C-peptide as measure of, 486-493
human gene
 abnormal products of, 693-698
immunoreactive
 fetal rat, 50-55
increased prebreakfast requirements in insulin-dependent diabetics
 roles of insulin clearance and sensitivity and, 60-63
-induced hypoglycemia
 role of sympathetic nervous system in glucagon response to, in normal and streptozotocin-diabetic rats, 1154-1158
-induced hypoglycemia in insulin-dependent diabetics
 plasma β -thromboglobulin response to, 907-909
-induced internalization of the insulin receptor in isolated rat adipose cell, 13-17
infusion
 post-pancreatectomy, glucose counterregulation and, 1112-1118
infusion, continuous subcutaneous in insulin-dependent diabetics, 832-836
infusion, portal and peripheral venous in depancreatized dogs
 glucose production and utilization and, 984-989
infusion in rats
 insulin responsiveness and, 444-449
infusion study
 effects of glycemic control on glucose counterregulation and, 394-399
infusion test
 glucose counterregulation in insulin-dependent diabetes and, 732-736
-like growth factors
 diabetes in young subjects and, 1175-1178
-like material in parotid gland of rats
 immunochemical studies of, 661-666
low-density lipoprotein degradation by in vivo stimulation of, 333-338
metabolic effects of pulsatile vs. continuous delivery in normal man, 1169-1173
-mimicking activities of insulin receptor antibodies from serum of insulin-resistant, hypoglycemic patient, 301-303
molecule, evidence for separate handling in vivo of different regions of, 721-726
porcine and biosynthetic human
 activation of pyruvate dehydrogenase complex, 681-684
processing by bovine endothelial cells in culture, 794-800
proinsulin conversion to in isolated rat islets
 effects of monensin on, 1019-1023
regulation of cytosolic phosphoenolpyruvate carboxykinase mRNA
 in rat liver, 328-332
regulation of sodium/potassium pump in rat hepatoma cells, 428-434
release
 amino acid-induced, stimulus-secretion coupling of, 464-468
 by bioartificial pancreas, 752-760
 in vitro from insulinomas transplanted into rat kidney, 1-7
 thiol-dependent and non-thiol-dependent stimulations, 251-57
 zinc efflux and, in cultured rat islets, 229-233
release, glucose-stimulated
 gastric inhibitory polypeptide and, 950-956
release from isolated perfused rat pancreas
 endogenous arachidonic acid metabolites and, 929-935
release in obese rats
 gastric inhibitory polypeptide and, 536-542
release from rat pancreatic islets
 inhibition by dopamine analogues, 888-893
renal reabsorption of calcium and, 991-993
replacement in fasted-refed streptozotocin-diabetic rats
 onset of liver glycogen synthesis after fasting and refeeding, 944-948
requirements
 midnocturnal insulin infusion and, 266-269
resistance
 chloroquine-induced inhibition of insulin degradation and, 1133-1136
 continuous insulin infusion and, 832-836
 in Cushing's disease, insulin binding to erythrocytes and, 455-459
 Epstein-Barr virus transformed lymphocytes downregulation and, 421-426
 lipoprotein-induced in aortic endothelium, 1039-1043
 morning, 266-269
 "postreceptor," 450-454
resistance in mice
 genetic background and dehydroepiandrosterone therapy, 26-31
resistant and hypoglycemic patient
 insulin receptor antibodies from serum of, 301-303
response to secretagogues
 in early type I diabetes, 516-520
responses among rat tissues in vivo
 2-deoxyglucose method for comparing rates of, 141-151
responsiveness
 after induced hyperinsulinemia in rats, 444-449
secretion
 dawn phenomenon in nondiabetic humans and, 1150-1153
 epicatechin and, 291-295

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

in isolated pancreatic islets of genetically diabetic mouse, 1120-1123
 somatostatin and, 510-515
 tolbutamide and glyburide study in rat pancreatic islets, 499-503
 secretion, glucose-induced
 concanavalin A and alloxan interactions and, 164-169
 secretion in models of reduced β -cell mass
 abnormal glucose regulation of, 637-672
 secretion by neonatal rat pancreatic islet cells
 sodium salicylate and, 872-878
 secretion in rat islets of Langerhans during fasting
 effect of 2-bromostearate on, 858-862
 sensitivity index
 correlation in dogs between glucose tolerance tests and euglycemic clamp studies, 362-368
 sensitivity of islets of Langerhans in obese subjects with resistance to glucoregulation, 305-309
 -stimulated glucose disposal
 in non-insulin-dependent diabetics, 643-647
 -stimulated glucose utilization
 comparative relative effects of obesity and non-insulin-dependent diabetes on, 622-626
 -stimulated glucose utilization in normal subjects
 relationship to plasma insulin response to oral glucose, 460-463
 stimulus-secretion coupling during culture of rat fetal islets
 differential effects of age vs. glycemic stimulation of, 1028-1037
 therapy
 antibody response in HLA-typed insulin-dependent diabetes, 966-969
 bone formation in streptozotocin-diabetic rats and, 825-830
 metabolic alterations in heme synthesis in streptozotocin-diabetic rats and, 37-43
 in obese, non-insulin-dependent diabetics, 634-641
 -treated diabetics
 reticulophagocytic function in, 813-818

INSULIN CLAMP TECHNIQUE. See Euglycemic glucose clamp studies

INSULIN-DEGRADING ENZYME

insulin degradation by isolated mouse pancreatic acini and, 64-71

INSULIN GENE

human, polymorphic locus associated with
 insulin-dependent diabetes and, 176-182

INSULIN INFUSION SYSTEMS

insulin requirements for meal study and, 266-269
 portable pump
 and continuous subcutaneous insulin infusion study in insulin-resistant diabetics, 832-836

INSULIN RECEPTORS

antibodies to
 in serum from insulin-resistant and hypoglycemic patient, 301-303
 binding studies
 terbium as fluorescent probe for, 1106-1111
 biosynthetic human proinsulin and, 1062-1067
 detection of autoantibodies against, 1051-1054
 in Epstein-Barr virus-transformed lymphocytes from extremely insulin-resistant patients, 421-426
 insulin binding to
 recognition by monoclonal anti-insulin antibodies and, 778-784
 insulin binding and action study in isolated fetal rat hepatocytes and, 864-870
 insulin-induced internalization in isolated rat adipose cells, 13-17
 insulin resistance in Cushing's disease and obesity and, 455-459
 low-affinity in isolated adult rat cardiocytes
 evidence for functional role of, 214-217
 from rat skeletal muscle
 phosphorylation of, 704-708
 regulation and desensitization in rat hepatoma cells, 477-484
 visualization by immunoblotting, 923-928

INSULIN TOLERANCE TESTS

induced hyperinsulinemia in rats and, 447

¹²⁵I-INSULIN

binding by cultured rat hepatocytes
 sulfonylurea and, 285-289
 binding to Epstein-Barr virus-transformed lymphocytes from extremely insulin-resistant patients, 421-426
 binding to erythrocytes
 and evaluation of insulin resistance in Cushing's disease, 455-459

measurement of adsorption isotherms of onto various materials, 674-679
 processing by bovine endothelial cells in culture, 794-800
 in rat hepatocytes
 immunologically active fragment released by, 355-360

INSULIN-LIKE GROWTH FACTORS

diabetic retinopathy and nephropathy and, 125-128

INSULINOMAS

rat, insulin biosynthesis, storage, and secretion in compared with rat islet cells, 556-560
 transplanted into rat kidney
 fuel-induced in vitro insulin disease from, 1-7

INSULINOPENIA

anti-beta-cell immunity in diabetic dogs and, 135-140

INSULITIS

development of streptozotocin diabetes in mice and thymic immunity and, 894-899
 pancreatic, in spontaneously diabetic young adult BB rats
 onset and progression of, 33-36

INTERLEUKIN-2

synthesis
 in insulin-dependent diabetics, 552-555

IRRADIATION

total lymphoid
 prevention of diabetes in susceptible rats with, 543-546

ISCHEMIA

effect on insulin production and function after islet transplantation of fetal mouse pancreas, 376-381

ISLETS OF LANGERHANS

concanavalin A and alloxan interactions on glucose-induced insulin secretion and biosynthesis from, 164-169
 insulin secretion in fasting rats, 2-bromostearate and, 858-862
 isolation from human pancreas, 1055-1060
 normal insulin sensitivity in obese subjects with resistance to insulin glucoregulatory actions, 305-309
 rat
 epicatechin effects on, 291-295

January, 1-104
 February, 105-206
 March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

April, 305-408
 May, 409-504
 June, 505-609

July, 611-708
 August, 709-811
 September, 813-916

October, 917-1018
 November, 1019-1125
 December, 1127-1231

3-ISOBUTYL-1-METHYLXANTHINE

in streptozotocin-diabetic rats
glucose regulation of insulin secretion
and, 671-672

J

JEJUNUM

human
effect of somatostatin and atropine on
intestinal transit time and fructose
absorption in, 548-550

JUVENILE DIABETES

differential sensitivity to β -cell secretagogues in "early," type I, 516-520
insulin-dependent
islet cell cytotoxic antibodies in, 224-228
Pittsburgh morbidity and mortality study
of, 271-276
serum insulin-like growth factors in glycemic control and, 790-793
thyroid function and prolactin levels in, 522-525

K

KETOGENESIS

regulation of, 1188-1193

KETONE BODIES

kinetics and lipolysis in man
epinephrine- and somatostatin-induced
insulin deficiency and, 738-743

KETONES

glycogen and fasting and, 1188-1198

KIDNEYS

disease
insulin-dependent diabetes morbidity
and mortality study in Pittsburgh
and, 274
glomerular basement membrane metabolism
of sulfated glycosaminoglycans
in streptozotocin-diabetic rats, 8-11
glomerular polyol accumulation in diabetics
prevention by oral sorbinil, 604-606
proteinuria patterns in diabetics and, 686-690
rat
insulin release in vitro from insulinomas
transplanted into, 1-7
reabsorption of calcium, 991-993

subcapsular islet cell transplantation,
910-914
of cryopreserved fetal mouse islets,
975-977
of streptozotocin-diabetic monkeys,
417-420

L

LESIONS

of microangiopathy
in chronically diabetic monkeys, 415-420

LEUCINE

-induced insulin release
islet thiols and, 251-257

LIPIDS

metabolism
in diabetic aborigines, lifestyle study
of, 596-603

LIPOLYSIS

epinephrine and somatostatin-induced
insulin deficiency and, 738-743

LIPOPROTEIN

-induced insulin resistance in aortic endothelium, 1039-1043
low-density
glucosylation and catabolism of, 130-133
in vivo stimulation of degradation by
insulin, 333-338

LIPOXYGENASE

-derived metabolites of arachidonic acid
effects on glucose-induced insulin secretion,
119-123

LIVER

anabolic-catabolic cycle and, 1188-1198
extracts from control and alloxan-diabetic
rats
protein phosphatase activities in, 576-578
glucose output
glyburide therapy in non-insulin-dependent
diabetics and, 348, 351
glucose-6-phosphatase
carbohydrate feeding in rats and
suppression of, 192-195
glycogen synthesis in fasted-refed rats
streptozotocin diabetes and peripheral
insulin replacement and, 944-948
isolated fetal rat hepatocytes
insulin binding and action in, 864-870

ketogenesis

glucagon and, 1191
membranes, of tumor-bearing and hypophysectomized rats
glucagon binding to, insulin and
growth hormone and, 978-982
perfused rat
tolbutamide stimulation of fructose-2,6-bisphosphate formation in,
495-498

rat

effect of streptozotocin diabetes on
plasma membrane calcium uptake
activity, 1072-1076
insulin and glucagon regulation of cytosolic
phosphoenolpyruvate carboxykinase mRNA in, 328-332
plasma membrane calcium uptake activity
effect on streptozotocin diabetes in, 1072-1076
rat hepatocytes
insulin studies in, 355-360
sulfonylurea and insulin-dependent
glycogenesis and insulin binding
in, 285-289
rat hepatoma cells
insulin regulation of sodium/potassium
pump in, 428-434
secretion and extraction of insulin
C-peptide as measure of, 486-493

LUNG

rat

glucose metabolism and insulin responses,
147-148

LUPUS NEPHRITIS

insulin resistance and hypoglycemia and
insulin receptor antibodies in serum of
patient with, 301-303

LUTEINIZING HORMONE

absent or delayed preovulatory surge in
streptozotocin-diabetic female
rats, 324-326

LYMPHOCYTES. See also β -Lymphocytes; T-lymphocytes

Epstein-Barr virus-transformed from extremely
insulin-resistant patients
downregulation studies in, 421-426
interleukin-2 synthesis
in insulin-dependent diabetes, 552-555

β -LYMPHOCYTES

deficient function in mice induction of
streptozotocin-diabetes and,
105-110

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

M

MACROPHAGES

reticulophagocytic studies in insulin-treated diabetics and, 815-816

MAJOR HISTOCOMPATIBILITY COMPLEX

of diabetic BB rats
restriction fragment polymorphism in, 807-809
pathogenesis of diabetes in genetically diabetic mice and, 1068-1071

MALONYL-CoA

hepatic, ketogenesis and, 1191-1193

METABOLIC CLEARANCE RATE

evidence for separate handling in vivo of different regions of insulin molecule, 721-726
glucose
effects of obesity and non-insulin-dependent diabetes on, 622-626
insulin therapy in non-insulin-dependent obese diabetics and, 639
in insulin-treated non-insulin-dependent diabetics, 643-647

METABOLISM

calcium
insulin and, 991-993
carbohydrate
effects of biosynthetic human proinsulin on, 762-769
carbohydrate and lipid
in diabetic aborigines after reversion to traditional life, 596-603
effects of pulsatile vs. continuous human insulin delivery in normal man on, 1169-1173
heme synthesis and degradation in female rats
diabetes-induced alterations in, 37-43
insulin
prebreakfast insulin requirements in diabetics and, 60-63
insulin tracers, 721-726
mouse islet β -cell
nicotinamide and alloxan toxicity and, 937-942
myocardial, in rats
effects on acute and chronic streptozotocin diabetes on, 1078-1083
myocardial, in streptozotocin-diabetic rats
tolbutamide and, 1138-1143
patterns during development of diabetic syndrome in sand rats, 37-43, 438-442
phospholipid, in rat adipose tissue
insulin mechanism of action on, 648-655

role of glycogen and ketones in fasting, 1188-1198
splanchnic glucose and substrate growth hormone following oral glucose loading in healthy humans and, 19-24
of sulfated glycosaminoglycans in rat glomerular basement membrane streptozotocin diabetes and, 8-11

3-O-METHYLGLUCOSE

transport in isolated adult rat cardiocytes
effect of EDTA on insulin binding and transport and, 214-217

MEXICAN-AMERICANS

diabetes prevalence study in genetic native American gene pool and, 86-91

MICE

alloxan-induced hyperglycemia in nicotinamide and, 937-942
cryopreserved proislets
syngeneic transplantation of, 975-977
fetal pancreas
effect of ischemia and temperature on insulin production in, 376-381
genetically diabetic
dynamic insulin secretory response of isolated pancreatic islets from, 1120-1123
genetically diabetic or obese
dehydroepiandrosterone therapy and heredity in, 26-31
genetically obese
behavioral manipulation of diabetic phenotype in, 616-618
genetically obese-diabetic
influence of major histocompatibility complex on pathogenesis of diabetes in, 1068-1071
human fetal pancreatic explants transplanted into histologic differentiation of, 1180-1186
immunologic studies on induction of streptozotocin diabetes in, 771-776
induction of streptozotocin diabetes by subdiabetogenic doses of streptozotocin, 105-110
isolated pancreatic acini
insulin degradation by, 64-71
lean and genetically obese-diabetic muscle protein turnover in perfused hindquarters of, 1160-1164
susceptibility to streptozotocin diabetes genetic background and, 567-570
thymic immunity and insulinitis and development of streptozotocin diabetes in, 894-899

MICROANGIOPATHY

development in chronically diabetic monkeys, 415-420

MICRONESIANS

ethnic differences in susceptibility to non-insulin-dependent diabetes in two urbanized populations of, 1002-1007

MICROSCOPY

of cryopreserved transplanted fetal mouse proislets, 976-977
electron
of dermal nerve tissue from diabetics, 244-249
evidence against pancreas, tight junctions and, 101-104
of glucagon-producing hybrid cells, 880-883, 886
microangiopathy in streptozotocin-diabetic monkeys and, 417-420
of pancreatic sections from cysteamine-treated rats, 514
of human fetal pancreatic explants transplanted into mice, 1180-1186
light
of transplanted fetal mouse pancreas after ischemia, 378, 380

MINERALS

copper, zinc, and manganese in polymorphonuclear leukocytes from diabetics, 588
sodium/potassium pump
and insulin regulation in rat hepatoma cells, 428-431

MONENSIN

and proinsulin conversion to insulin and insulin secretion in isolated rat islets, 1019-1023

MONKEYS

Macaca nigra
islet cell cytoplasmic antibodies in, 219-223
rhesus
maternal diabetes and chronic hyperinsulinemia in fetus, 656-659
streptozotocin-diabetic
early lesions of microangiopathy in, 415-420

MORPHINE

intracerebroventricular instillation in dogs
hyperglycemia and, naloxone and, 619-621

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

MORTALITY

- in diabetic autonomic neuropathy breathing and sleep studies and, 1025-1027
- in insulin-dependent diabetes Pittsburgh study of, 271-276

MUSCLE

- capillaries, formation in insulin-dependent diabetics
- physical training and, 851-857
- protein turnover in lean and genetically obese-diabetic mice, 1160-1164
- rat
- deoxyglucose measurement of insulin dose-response in, 153-158
- rat skeletal
- alloxan diabetes and protein phosphatase activities in, 576-578
- glucose metabolism and insulin response of, 148
- insulin receptors solubilized from, phosphorylation of, 704-708
- from streptozotocin-diabetic monkeys morphologic study of, 417

MYO-INOSITOL

- glomerular accumulation in diabetic rats sorbinil and prevention of, 604-606
- mediated defect in sodium-potassium ATPase activity sorbinil action in diabetic peripheral nerve and, 712-715

MYOCARDIUM

- metabolism and mechanical performance in streptozotocin-diabetic rats
- tolbutamide and, 1138-1143
- metabolism in rats
- effects of acute and chronic streptozotocin diabetes in, 1078-1083

N

NALOXONE

- centrally induced hyperglycemia in dogs and, 619-621

NAURUANS. See Micronesians

NEPHROPATHY

- proteinuria patterns in diabetes and, 686-690
- in streptozotocin-diabetic monkeys, 418
- Von Willebrand factor, fibronectin, and insulin-like growth factors I and II in, 125-128

NERVES. See also Nervous system

- acoustic
- impaired auditory brainstem-evoked responses in insulin-dependent diabetics, 1085-1089
- peripheral
- of streptozotocin-diabetic rats, action of sorbinil in, 712-715

NERVOUS SYSTEM

- axonal transport and motor nerve conduction velocity in streptozotocin-diabetic rats
- sorbinil treatment and, 470-475
- dermal nerves
- diabetic neuropathy studies and, 244-249
- impaired auditory brainstem-evoked responses in insulin-dependent diabetics, 1085-1089
- nerve conduction defects in diabetics peripheral nerve sorbitol and fructose levels and, 45
- reduced central conduction velocity in diabetics
- functional correlates of, 627-633
- sympathetic, and glucagon response to insulin hypoglycemia
- in normal and streptozotocin-diabetic rats, 1154-1158

NEUROPATHY, DIABETIC

- autonomic
- breathing and sleep and, 1025-1027
- dermal nerve studies and, 244-249
- impaired auditory brainstem-evoked responses and, 1085-1089

NICOTINAMIDE

- alloxan toxicity and islet β -cell metabolism and, 937-942

NONENZYMATIC GLYCOSYLATION

- collagen aging of rat tendon fibers in vitro by browning and, 57-59
- effects of salicylates in streptozotocin-diabetic rats and, 745-750
- inhibition of fibronectin binding to matrix components by, 970-973
- inhibition of heparin-catalyzed human antithrombin III activity by, 532-535

NORDIHYDROGUAIARETIC ACID

- insulin, glucagon, and prostaglandin E release from isolated perfused rat pancreas and, 932, 933

NORMOGLYCEMIA

- in newly diagnosed insulin-dependent diabetics, 995-1001

O

OBESITY

- behavioral manipulation of diabetic phenotype in genetically obese mice, 616-618
- carbohydrate intolerance and comparative effects on physical training and diet therapy on, 311-318
- diabetes and
- insulin requirements and, 266-269
- diabetic syndrome in sand rats and, 438-442
- insulin resistance in
- compared with insulin resistance in Cushing's disease, 455-459
- insulin sensitivity of islets of Langerhans and insulin glucoregulatory actions and, 305-309
- insulin-stimulated glucose utilization and compared with non-insulin-dependent diabetes, 622-626
- non-insulin-dependent diabetes in Mexican Americans and, 86-91
- pancreatic glucagon levels in, 277-280
- in rats
- gastric inhibitory polypeptide and insulin release and, 536-542
- role of gastric inhibitory polypeptide in, 950-956

OBITUARIES

- Ellenberg, Max, 1017
- Knowles, Harvey, C., Jr., 608

OPIATES

- naloxone and centrally induced hyperglycemia in dogs, 619-621

ORGANOGENESIS

- embryos of streptozotocin-diabetic rats growth retardation during early stages of, 281-284

OSTEOPENIA

- bone formation in streptozotocin-diabetic rats and, 825-830

3H-OUBAIN

- binding to rat hepatoma cells
- insulin regulation of sodium/potassium pump study and, 429

OXYGEN

- maximal consumption, physical conditioning estimates in glucose utilization study and, 461
- uptake
- physical training study in insulin-dependent diabetics and, 852
- uptake by mouse islets treated with alloxan, 939, 941

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

P

PANCREAS

- alpha cell autoantibodies in insulin-dependent diabetes
 - glucagon response to arginine and, 435-437
- β -cell function in neonatal rats
 - cyroheptadine treatment during gestation and, 572-575
- beta cells
 - differential sensitivity to secretagogues in juvenile diabetics, 516-520
 - obesity and, 305-309
 - insulinoma as model for, 1-7
- chronic beta receptor stimulation
 - effects on glucose metabolism in non-diabetic subjects, 1144-1148
- complement-fixing islet cell antibodies in spontaneously diabetic BB rats, 93-95
- fetal bovine extracts
 - β -endorphin-like immunoreactivity in, 235-238
- fetal human fragments
 - long-term culturing method for, 1165-1168
- fetal mouse
 - effect of ischemia and temperature on insulin production by, 376-381
- fetal mouse cryopreserved islets
 - syngeneic transplantation of, 975-977
- fetal rat islets
 - maturation of insulin stimulus-secretion coupling during culture of, age vs. glycemic stimulation, 1028-1037
- glucagon levels
 - obesity and, 277-280
- hamster islet cells
 - fusion with 6-thioguanine-resistant insulinoma cells, 879-886
- human
 - isolation of islets of Langerhans from, 1055-1060
- human fetal explants transplanted into nude mice
 - histologic differentiation of, 1180-1181
- insulinitis in spontaneously diabetic BB rats
 - onset and progression of, 33-36
- islet cell antibodies
 - prediabetic period and, 717-719
- islet cell antigens, isolation of T-lymphocyte lines with
 - specificity for from spontaneously diabetic rats, 801-803
- islet cell cytoplasmic antibodies
 - in *Macaca nigra*, 219-223
- islet cell cytotoxic antibodies
 - insulin-dependent juvenile diabetics, 224-228

- islet cell renal subcapsular transplantation in dogs, 910-914
- islet thiols
 - insulin release and, 251-257
- islets
 - chemiluminescence as index of free radical production by, 160-163
 - secretory and oxidative response to L-asparagine, 464-468
- isolated islet grafts in streptozotocin-diabetic rats, 405-406
- isolated islets from genetically diabetic mice
 - dynamic secretory response of, 1120-1123
 - insulin secretory response from, 1120-1123
- isolated rat islets
 - effects of monensin on proinsulin conversion to insulin, 1019-1023
 - endogenous arachidonic acid metabolites and insulin and glucagon release from, 929-935
 - thiol-dependent and non-thiol-dependent insulin release from, 251-257
- mouse
 - insulin degradation by isolated acini from, 64-71
- neonatal rat
 - streptozotocin-induced β -cell deficiency in, 170-175
- normal endocrine
 - evidence against presence of tight junctions in, 101-104
- partially depancreatized rats
 - poly(ADP-ribose) synthetase inhibitors and, 401-403
- perfused, from lean and obese rats
 - gastric inhibitor polypeptide and insulin release from, 536-542
- rat
 - 2-bromostearate effects on glucose-phosphorylating activities during fasting, 858-862
 - somatostatin and insulin secretion by, 510-515
- rat islet β -cell granules
 - glucose-induced changes in calcium content and uptake, 409-413
- rat islet cells
 - alloxan-induced free radical production in, 1008-1011
 - glucose-stimulated insulin secretion by sodium salicylate and, 872-878
 - insulin biosynthesis, storage and secretion compared with tumor cells, 556-561
- rat islets
 - inhibition of insulin release by dopamine analogues, 888-893
 - insulin release and zinc efflux from, 229-233

- streptozotocin diabetes and depletion of insulin from, 661-666
- rat and monkey islet cell antibodies
 - immunohistochemical and immunofluorescence and detection of, 709-711
- U-shaped bioartificial, 752-760

PANCREATECTOMY

- in dogs
 - and effects of portal and peripheral venous insulin infusion on glucose production and utilization in, 984-989
- glucose counterregulation in patients after comparison with other forms of diabetes, 1112-1118
- partial in rats
 - abnormal glucose regulation of insulin secretion in, 667-672

PAROTID GLAND

- in rats
 - immunochemical studies of insulin-like material in, 661-666

PEPCK

- synthesis in rat liver, insulin, and glucagon and, 328-332

C-PEPTIDE

- insulin molar ratio
 - measurement of hepatic insulin extraction by, 489-490, 492
- plasma levels
 - dawn phenomenon in nondiabetic humans and, 1150-1153
 - during fat loading and different euglycemic clamp conditions, 583

pH

- insulin binding in rat hepatoma cells and, 480

PHOSPHOLIPIDS

- metabolism in rat adipose tissue
 - mechanism of action of insulin on, 648-655

PHOSPHORYLATION

- hepatic capacity
 - glucose and, 1196-1197
- of insulin receptors solubilized from rat skeletal muscle, 704-708

PHYSICAL TRAINING

- carbohydrate metabolism in non-insulin-dependent diabetics with
 - glucose intolerance and, 311-318
- in glucose utilization study and, 461

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

PIMA INDIANS

- diabetes prevalence among, 86
- obese and nonobese
- insulin sensitivity studies in, 305-309

PITTSBURGH, PENNSYLVANIA

- insulin-dependent diabetes morbidity and mortality study in, 271-276

PITUITARY GLAND

- tissue from rats
- glucose metabolism and insulin response of, 148

PLACENTA

- human, visualization of insulin receptor by immunoblotting, 923-928

PLASMA

- catecholamines
 - induced hyperinsulinemia in rats and, 447
- dopamine β -hydroxylase activity
 - effect of hyperglycemia and other sugars on, 1127-1131
- free fatty acids
 - epinephrine and somatostatin-induced insulin deficiency and, 738-743
- glucagon and C-peptide measurement in obese subjects, 305-309
- glucagon during hypoglycemia post-pancreatectomy and other forms of diabetes compared, 1112-1118
- glucose
 - in diabetes prevalence study of Mexican Americans, 86-91
- glucose and insulin continuous insulin infusion in obese subjects and, 306, 309
- effects of obesity compared with non-insulin-dependent diabetes on, 622-626
- during euglycemic clamping fat loading and, 582
- in insulinoma-bearing rats, 3
- stress and epinephrine in genetically obese mice and, 616-618
- young β -cell-deficient rats (in), 170-175
- glucose in nondiabetics sucrose loading and acarbose and, 207-212
- glucose, insulin, and C-peptide dawn phenomenon in normal humans and, 1150-1153
- immunoreactive glucagon levels elevated pancreatic glucagon in obesity and, 277-280
- insulin response to oral glucose relationship to insulin-stimulated glucose utilization, 460-463
- low-density lipoprotein levels in diabetics

- glucosylation of low-density lipoproteins and, 130-133
- of non-insulin-dependent diabetics postbinding inhibitor of insulin action in, 450-454

C-peptide

- insulin secretion measurement and, 486-487

C-peptide:insulin molar ratio

- as indicator of hepatic insulin extraction, 489-490

β -thromboglobulin response to insulin-induced hypoglycemia

- in insulin-dependent diabetics, 907-909

- Von Willebrand factor, fibronectin, and insulin-like growth factors I and II in diabetics and nondiabetics, 125-128

PLASMA MEMBRANES

- of rat islets
 - calmodulin and cyclic AMP and hormone secretion from, 339-344

PLASMAPHERESIS

- effects of islet cell cytotoxic antibodies from insulin-dependent juvenile diabetics, 224-228

POLY(ADP-RIBOSE) SYNTHETASE INHIBITORS

- and amelioration of diabetes in rats, 401-403

POLYMORPHONUCLEAR LEUKOCYTES

- superoxide dismutase in diabetics and normals, 586-588

POLYOL

- glomerular accumulation in diabetes oral sorbinil and prevention of, 604-606

POLYOL PATHWAY

- activity
 - direct measurement in ocular lens, 196-199
 - sorbinil inhibition of red blood cell sorbitol in insulin-dependent diabetics, 45-49
- inhibition
 - sorbinil action in diabetic peripheral nerve and, 712-715

POLYPEPTIDES

- glucose-dependent insulinotropic augmentation of insulin and, 389-393

POTASSIUM

- sodium ATPase activity, *myo*-inositol-mediated defect in sorbinil action in diabetic peripheral nerves and, 712-715

PREGNANCY

- cycloheptadine treatment of rats during alterations in neonatal rat pancreatic β -cells and, 572-575

PREGNANCY, DIABETIC

- chronic hyperinsulinemia in fetal rhesus monkey and, 656-659
- glycosylated fetal hemoglobin and hyperglycemia and birth weight in infants of diabetic mothers, 81-85
- rabbit model of serum somatomedin-C concentrations in, 590-594

PREPROINSULIN

- in Syrian hamster sequence of cDNA encoding in, 297-299

PROINSULIN

- abnormal human intermediates, 697-698
- biosynthetic human effects on carbohydrate metabolism, 762-769
- in vitro activity in isolated rat adipocytes, 1062-1067
- in vitro characterization of, 111-118
- conversion to insulin in isolated rat islets effects of monensin on, 1019-1023
- specific antigenic determinants in humans
- monoclonal antibodies and identification of, 1012-1015

PROLACTIN

- levels in insulin-dependent diabetic children and adolescents, 522-525

PROSTAGLANDIN E

- release from isolated perfused rat pancreas arginine and, 931-932

PROSTATE GLAND

- weight in streptozotocin-diabetic male rats, 819-823

PROTEIN

- dietary streptozotocin effects in rats and, 383-388
- insulin receptor effects of insulin binding on, 1106-1111
- muscle turnover in perfused hindquarters of lean and genetically obese-diabetic mice, 1160-1164
- retinal capillary pericyte synthesis in culture glucose concentration and, 785-788

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

SUBJECT INDEX 1984

synthesis

- insulin action on phospholipid metabolism in rat adipose tissue and, 648-650
- vitamin D-dependent calcium-binding in cerebellum of diabetics
- immunohistochemical detection of, 917-921

PROTEIN PHOSPHATASE

- activities in heart, liver, and skeletal muscle extracts from control and diabetic rats, 576-578

PROTEINURIA

- patterns in diabetes
- pathogenesis and prevention of diabetic nephropathy and, 686-690

PUBERTY

- effect of glycemic control on serum insulin-like growth factor in diabetic children, 790-793
- thyroid function and prolactin levels in insulin-dependent diabetic children and adolescents and, 522-525

PUROMYCIN

- insulin action on phospholipid metabolism in rat adipose tissue and, 648-655

PYRUVATE DEHYDROGENASE

- activation by porcine and biosynthetic human insulin in cultured human fibroblasts, 681-684
- mechanism of action on phospholipid metabolism in rat adipose tissue, 648-655

R

RABBIT

- diabetic pregnancy model
- serum somatomedin-C concentrations in, 590-594

RATS

- adipose tissue phospholipid metabolism
- insulin mechanism of action on, 648-655
- alloxan-diabetic
- protein phosphatase activities in tissue extracts from, 576-578
- BB
- specific histocompatibility gene polymorphism in, 700-703
- fasted and refed, onset of liver glycogen synthesis

- effects of streptozotocin diabetes and peripheral insulin replacement, 944-948

- fetal islets, differential effects of age vs. glycemic stimulation on insulin stimulus-secretion coupling during culture of, 1028-1037

- hepatoma cells
- insulin receptor and desensitization study in, 477-484

- hepatoma cells insulin receptor
- visualization by immunoblotting, 923-928

- hypoglycemia and brain injury in, 1090-1097

- immunochemical studies of insulin-like material in parotid gland of, 661-666

- isolated fetal hepatocytes
- insulin binding and action in, 864-870

- isolated perfused pancreas
- arachidonic acid metabolites and insulin and glucagon release from, 929-935

- islet cells
- alloxan-induced free radical production in, 1008-1011

- islets
- effects of monensin on proinsulin conversion to insulin in, 1019-1023

- isolated adipocytes
- in vitro activity of biosynthetic human proinsulin, 1062-1067

- liver
- tolbutamide stimulation of fructose-2,6-bisphosphate, 495-498

- neonatal pancreatic islet cell insulin secretion sodium salicylate and, 872-878

- non-insulin-dependent diabetes
- impaired insulin action in, 901-906
- pancreatic islet insulin release
- inhibition by dopamine analogues, 888-893

- perfused pancreas
- glibenclamide and glucose and glucagon release by, 505-509

- obese Zucker
- gastric inhibitory polypeptide and insulin release in, 536-542

- pancreatic islets
- amino acid-induced insulin release from, 464-468

- pregnant, treatment with cyproheptadine
- endocrine pancreas function in neonates and, 572-575

- skeletal muscle
- insulin receptors solubilized from, phosphorylation of, 704-708

- somatostatin and insulin release in, 510-515

- spontaneously diabetic insulin-dependent

- isolation of T-lymphocyte lines from, 802-803

- streptozotocin-diabetic
- action of sorbinil in peripheral nerves from, 712-715

- bone formation studies in, 825-830
- effect of tolbutamide on myocardial metabolism and performance, 1138-1143

- myocardial metabolism in, 1078-1083
- salicylates and nonenzymatic glycosylation and collagen in, 745-750

- sorbinil and axonal transport and motor nerve conduction velocity in, 470-475

- sorbinil and prevention of glomerular polyol accumulation in, 604-606

- streptozotocin-diabetic and normal
- insulin and renal reabsorption of calcium in, 991-993

- susceptible to diabetes
- total lymphoid irradiation and, 543-546

- tumor-bearing and hypophysectomized, glucagon binding to liver membranes of, 978-982

- tumor cells, insulin biosynthesis, storage, and secretion
- compared with rat islet cells, 556-560
- tumor and islet cells
- insulin biosynthesis, storage, and secretion in, 556-560

RDS-127

- inhibition of insulin release from rat pancreatic islets by, 888-893

REGIONAL TRANSCUTANEOUS OXIMETRY

- assessment of perfusion in diabetic foot by, 527-530

REPRODUCTION

- androgen responses in streptozotocin-diabetic male rats and, 819-823

RESPIRATION

- diabetic autonomic neuropathy and, 1025-1027

RETINA

- capillary pericyte protein and collagen synthesis in culture
- high-glucose concentration and, 785-788
- localization of aldose reductase in, 562-566

mRNA

- rat liver, insulin, and glucagon regulation of cytosolic phosphoenolpyruvate carboxykinase in, 328-332

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

S

SALICYLATES

nonenzymatic glycosylation and thermal stability of collagen in streptozotocin-diabetic rats and, 745-750

SAN ANTONIO, TEXAS

diabetes prevalence in Mexican-American study, 86-91

SAND RATS

metabolic pattern during development of diabetes in, 438-442

SCIATIC NERVE

action of sorbitol in streptozotocin-diabetic rats, 712-715

SERUM

insulin-like growth factors in diabetics
effect of glycemic control in, 790-793
insulin-resistant and hypoglycemic patient
insulin receptor antibodies in, 301-303

C-peptide concentrations

in insulin-dependent juvenile diabetics, analysis of islet cell cytotoxic antibodies and, 224-228
somatomedin-C concentrations in rabbit model of diabetic pregnancy, 590-594

thyroid hormones, thyroid-stimulating hormones, and prolactin
in insulin-dependent diabetic children and adolescents, 522-525

SEX

in insulin-dependent diabetes morbidity and mortality study in Pittsburgh, 271-276

of insulin-resistant diabetics in continuous subcutaneous insulin-infusion study, 832-833

SEX ORGANS

accessory in streptozotocin-diabetic male rats
androgen responses and, 819-823

SKIN

dermal nerve studies in diabetics, 244-249

SLEEP

diabetic autonomic neuropathy and, 1025-1027

SODIUM

-potassium ATPase activity, *myo*-inositol-mediated defect in
sorbitol action in diabetic peripheral nerve and, 712-715

SODIUM DODECYL SULFATE

visualization of insulin receptor by immunoblotting and, 923-928

SODIUM SALICYLATE

glucose-stimulated insulin secretion by neonatal rat pancreatic islet cells and, 872-878

SODIUM/POTASSIUM PUMP

insulin regulation of
in rat hepatoma cells, 428-434

SOMATOMEDIN-C

concentrations in serum of pregnant diabetic rabbits, 590-594

SOMATOSTATIN

-induced insulin deficiency
ketone body kinetics and lipolysis in man and, 738-743
insulin secretion and, 510-515
intestinal transit time and fructose absorption in perfused human jejunum and, 548-550
release
by insulinoma transplanted into rat kidney, 6
secretion
calcium and, 506

SORBINIL

action in diabetic peripheral nerve, 712-715
inhibition of red blood cell sorbitol in insulin-dependent diabetics
polyol pathway activity and, 45-49
prevention of glomerular polyol accumulation in diabetics and, 604-606

SORBITOL

accumulation in streptozotocin-diabetic rats
sorbitol treatment and, 470-475
polyol pathway activity in rabbit ocular lens and, 196-199
red blood cell, in insulin-dependent diabetes
sorbitol inhibition of, polyol pathway activity and, 45-49

SPLANCHNIC VEIN

effect of growth hormone on splanchnic glucose following oral glucose loading in healthy man, 19-24

SPLEEN

cells, transferred from streptozotocin-diabetic mice
induction of diabetes and, 771-776
clearance of NEM- and IGG-altered erythrocytes in insulin-treated diabetics, 813-818

glucose metabolism and insulin responses in rats, 147-148

STREPTOZOTOCIN

-induced free radical production in rat pancreatic islets
chemiluminescence as index of, 160-163
in neonatal rats, abnormal islet and adipocyte function with
near-normoglycemia in, 170-175
subdiabetogenic doses in mice deficient in functional β -lymphocytes, 105-110

STREPTOZOTOCIN DIABETES

abnormal glucose regulation of insulin secretion in reduced β -cell mass and, 667-672
effect on *in vivo* metabolism of labeled glomerular basement membrane in rats, 8-11
in female rats
heme synthesis and degradation and heme-containing enzymes and, 37-38
immunologic studies on induction in animals of, 771-776
in mice
genetic background and susceptibility to, 567-570
induction by subdiabetogenic doses of streptozotocin, 105-110
role of thymic immunity and insulinitis in development, 894-899
in monkeys
early lesions of microangiopathy in, 415-420

in rats
absent or delayed preovulatory luteinizing hormone surge in, 324-326
action of sorbinil in diabetic peripheral nerves from, 712-715
allograft survival studies in, 405-406
altered responses to androgen in, 819-823
bone formation in, 825-830
effects of hyperglycemia and sugars on plasma dopamine β -hydroxylase and, 1127-1131
effects of salicylates on nonenzymatic glycosylation and collagen, 745-750
effects on myocardial metabolism, 1078-1083
growth retardation in embryos from, 281-284
insulin-like material in parotid glands and, 661-666
insulin and renal reabsorption of calcium in, 991-993
liver plasma membrane calcium uptake activity and, 1072-1076

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

- membrane structural/functional properties of adipocytes from, 258-264
- non-insulin-dependent, impaired insulin action in, 901-906
- onset of liver glycogen synthesis after fasting and refeeding of, 944-948
- oral sorbinil and hyperglycemia in, 45-49
- prior adaptation to high-protein carbohydrate-free diet and, 383-388
- sorbinil and axonal transport and motor nerve conduction velocity and, 470-475
- sorbinil and prevention of glomerular polyol accumulation and, 604-606
- sympathetic nervous system role in glucagon response to insulin hypoglycemia in, 1154-1158
- tolbutamide and myocardial metabolism and mechanical performance and, 1138-1143
- STRESS**
- diabetic phenotype in genetically obese mice and, 616-618
- SUCCINATE DEHYDROGENASE**
- myocardial
- in streptozotocin-diabetic rats, 1078-1083
- SUCROSE**
- loading in nondiabetics
- effects of acarbose on glycemia and absorption, 207-212
- SUGARS**
- collagen aging in vitro by nonenzymatic glycosylation and browning and, 57-59
- effect on plasma dopamine- β -hydroxylase activity, 1127-1131
- SULFONYLUREAS**. See also Glyburide; Tolbutamide
- insulin-dependent glycogenesis and insulin binding in cultured rat hepatocytes and, 285-289
- therapy
- in non-insulin-dependent diabetics, acute and chronic effects of, 346-353
- SUPEROXIDE DISMUTASE**
- in diabetic polymorphonuclear leukocytes, 586-588
- SURGERY**. See Pancreatectomy; Transplantation
- SYRIAN HAMSTERS**
- preproinsulin cDNA encoding in, 297-299
- T**
- T-CELLS**
- activated, from insulin-dependent diabetics, culture and phenotype of, 319-323
- deficiency in mice
- induction of streptozotocin diabetes and, 771-776
- T-LYMPHOCYTES**
- elevated levels of Ia-positive glucose tolerance tests and, 717-719
- isolation of lines with specificity for islet cell antigens
- from spontaneously diabetic rats, 801-803
- TEMPERATURE**
- and insulin production and function after islet transplantation of fetal mouse pancreas, 376-381
- processing of insulin by bovine endothelial cells and, 797
- rat adipocyte uptake of 2-deoxyglucose and, 258-264
- TENDONS**
- rat
- collagen aging study in vitro by nonenzymatic glycosylation and browning, 57-59
- TERBIUM**
- as fluorescent probe for insulin receptor binding, 1106-1111
- TERBUTALINE SULFATE**
- induced beta receptor stimulation
- effects on glucose metabolism in non-diabetic subjects, 1144-1148
- TESTES**
- islets grafted into intra-abdominally placed
- in streptozotocin-diabetic rats, 405-406
- weight
- in streptozotocin-diabetic male rats, 819-823
- TESTOSTERONE**
- response in streptozotocin-diabetic male rats, 819-823
- THIOLS**
- islet
- insulin release and, 251-257
- THROMBIN**
- platelet vitamin E and thromboxane synthesis in insulin-dependent diabetes and, 239-243
- β -Thromboglobulin**
- plasma, response to insulin-induced hypoglycemia in insulin-dependent diabetics, 907-909
- THROMBOXANE**
- synthesis
- in insulin-dependent diabetes, 728-731
- platelet vitamin E and, 239-243
- THYMUS GLAND**
- development of streptozotocin diabetes in mice and, 894-899
- THYROID GLAND**
- function
- in insulin-dependent diabetic children and adolescents, 522-525
- THYROID HORMONE**
- insulin action in human adipose tissue and, 369-374
- typing in insulin-treated diabetics
- reticulophagocytic function and, 814
- TISSUES**
- connective, and inhibition of fibronectin binding to matrix components by nonenzymatic glycosylation, 970-973
- cultured rat adipose cells
- insulin-induced internalization of insulin receptor in, 13-17
- fetal human pancreatic fragments
- long-term culturing method for, 1165-1168
- heart, liver, and skeletal muscle extracts
- from control and alloxan-diabetic rats
- protein phosphatase activities in, 576-578
- rat
- comparison of rates of glucose metabolism and insulin resistance in, 141-151
- rat adipose
- phospholipid metabolism in, insulin action on, 648-655
- rat cardiocytes
- effect of EDTA on insulin binding and action in, 214-217
- rat hepatocytes
- release of immunologically active insulin fragments in, 355-360
- rat hepatoma cells
- insulin regulation of sodium/potassium pump in, 428-434

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

April, 305-408	July, 611-708
May, 409-504	August, 709-811
June, 505-609	September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

rat skeletal muscle
 phosphorylation of insulin receptors
 from, 704-708
rat tendon fibers
 collagen aging in vitro by nonenzymatic glycosylation and browning, 57-59
sorbitol in insulin-dependent diabetes sorbinil and, 45-49
from streptozotocin-diabetic monkeys
 early lesions of microangiopathy in, 417-420

TOLBUTAMIDE

differential sensitivity to
 in early type I diabetic children, 516-520
displacement of α - and β -adrenergic radioligands in rat pancreatic islet cells and membranes, glyburide compared with, 499-503
-induced insulin release
 islet thiols and, 251-257
myocardial metabolism and mechanical performance of streptozotocin-diabetic rats and, 1138-1143
-stimulation of fructose-2,6-bisphosphate formation in perfused rat liver, 495-498

TRANSCUTANEOUS OXIMETRY, 527, 530

TRANSPLANTATION

allograft survival studies in streptozotocin-diabetic rats, 405-406
of cryopreserved fetal mouse proislets, 975-977
of fetal mouse pancreas
 effect of ischemia and temperature on function after, 376-381
human fetal pancreatic explants into nude mice
 histologic differentiation of, 1180-1186
insulinomas into rat kidney
 fuel-induced in vitro insulin release from, 1-7
and long-term culturing of fetal human pancreatic tissue fragments, 1165-1168

renal subcapsular islet cell in dogs, 910-914
thymus implantation in nude mice
 development of streptozotocin diabetes and, 894-899

TUMORS

-bearing and hypophysectomized rats, glucagon binding to liver membranes from
 insulin and growth hormone and, 978-982
cells, rat, insulin biosynthesis, storage, and secretion in
 compared with rat islet cells, 556-560
produced by glucagon-producing hybrid cells, 879-886
rat hepatoma cells
 insulin receptor regulation and desensitization in, 477-484

TYROSINE AMINOTRANSFERASE

assay in rat hepatoma cells, 478

U

URINE

albumin
 patterns in diabetics, nephropathy and, 686-690
C-peptide
 as indicator of insulin secretion, 487-489, 491-492
samples
 from streptozotocin diabetic monkeys with early lesions of microangiopathy, 416-417

V

VASCULAR DISEASE

peripheral
 regional transcutaneous oximetry of diabetic foot and, 527-530

VEINS

portal, insulin infusion in depancreatized conscious dogs
 effects on glucose production and utilization, 984-989

VIRUSES

Epstein-Barr, lymphocytes from insulin-resistant patients transformed with
 downregulation in, 421-426

VITAMINS

D-dependent calcium-binding protein in cerebellum of diabetics
 immunohistochemistry and detection of, 917-921
E
 platelet, thromboxane synthesis in insulin-dependent diabetes and, 239-243

VON WILLEBRAND FACTOR

diabetic retinopathy and nephropathy and, 125-128

W

WEIGHT

birth, of infants of diabetic mothers
 correlation with glycosylated fetal hemoglobin, 81-85
gain
 induced hyperinsulinemia in rats and, 447

WOUNDING

endothelial cell responses to
 insulin and, 1099-1104

Z

ZINC

efflux from cultured rat islets
 insulin release and, 229-233

January, 1-104
February, 105-206
March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
April, 305-408
May, 409-504
June, 505-609
July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

Author Index

A

Abbondante, Ann Marie, 81-85
 Abdel-Hamid, M., 251-257
 Abe, Hiroshi, 1200-1202
 Abram, Jill D., 1062-1067
 Aguayo, James, 196-199
 Akagi, Y., 562-566
 Albisser, A.M., 995-1001
 Aldinger, Charles E., 45-49
 Almira, Ernesto C., 355-361
 Altszuler, Norman, 499-503
 Amiel, Stephanie A., 1175-1179
 Ammon, H.P.T., 251-257
 Andersen, Dana K., 950-957
 Andersson, A., 937-943
 Andreone, Teresa, 328-332
 Andres, Reubin, 950-957
 Andrews, W. John, 634-642
 Angeletti, Gabriella, 394-400
 Antonacci, G.M., 674-680
 Appel, Paul, 527-531
 Arilla, Eduardo, 858-863
 Arner, Peter, 369-375
 Arneric, Stephen P., 888-893
 Asayama, Kohtaro, 160-163, 1008-1011
 Asplin, C.M., 966-969
 Assan, Roger, 135-140
 Assimacopoulos-Jeannet, F., 444-449
 Auer, Roland N., 1090-1098
 Avioli, Louis V., 901-906

B

Baba, Shigeaki, 64-72
 Bailey, Anne C., 64-72
 Baker, Lester, 552-555
 Balsamo, Antonio, 522-526
 Bandlien, Karl O., 910-914
 Barnes, Dee, 648-655
 Barnett, Patrick, 196-199
 Barrett, Eugene, 838-845
 Beale, Elmus, 328-332
 Beck-Nielsen, Henning, 832-837
 Becker, D.J., 271-276
 Bedoya, Francisco J., 858-863
 Bell, Graeme I., 176-183, 200-202, 297-300
 Bellavere, Federico, 1085-1089
 Ben-Nun, Avraham, 700-703
 Bender, Timothy P., 778-784
 Benzi, R., 444-449
 Berchtold, P., 207-213

Bergental, Richard M., 762-770, 1112-1119

Berger, M., 277-280
 Berger, Willi, 73-76
 Bergman, Richard N., 362-368
 Berliner, J.A., 1039-1044
 Berrie, Mary Ann, 141-152
 Bevilacqua, Stefano, 838-845
 Beyer, H. Steven, 77-80
 Beyer-Mears, Annette, 604-607
 Bird, C.E., 627-633
 Bitar, Milad, 37-44
 Blackard, William G., 266-270
 Blazar, Bruce R., 1133-1137
 Bloom, S.R., 389-393
 Blue, Marie-Luise, 105-110
 Bogardus, Clifton, 311-318
 Bolinder, Jan, 369-375
 Bolli, Geremia B., 394-400, 732-737, 1150-1153
 Bompiani, G.D., 728-731
 Bone, Adrian, 1028-1038
 Bonner-Weir, S., 170-175, 667-673
 Borgel, Dominique, 907-909
 Boroujerdi, Massoud A., 721-727
 Bose, Carl L., 590-595
 Bratusch-Marrain, Paul R., 19-25
 Bray, George A., 1160-1164
 Brink, Stuart J., 516-521
 Brown, David M., 77-80, 1133-1137
 Brown, John C., 536-542, 950-957
 Brownlee, Michael, 532-535
 Brownschidle, C.M., 324-327
 Bruhlmann-Papazyan, M., 917-922
 Brunetti, Paolo, 394-400, 732-737, 1150-1153
 Buchan, Alison M.J., 536-542
 Buchwald, Sherry, 794-800
 Buffington, Cynthia K., 681-685
 Burant, Charles F., 704-708
 Burr, Ian M., 160-163, 1008-1011
 Buse, John B., 700-703
 Buse, Maria G., 704-708
 Bustillos, Dalia P., 1045-1050

C

Cacciari, Emanuele, 522-526
 Calcinaro, Filippo, 1150-1153
 Calverley, Peter M.A., 1025-1027
 Campbell, Lesley V., 813-818
 Campbell, Peter, 1150-1153
 Capdeville, M., 1039-1044

Cardella, F., 728-731
 Cardone, Claudio, 1085-1089
 Carlson, Rodney, 838-845
 Cassio, Alessandra, 522-526
 Castillo, M., 1169-1174
 Cataland, S., 239-243
 Catterall, James R., 1025-1027
 Cavender, D.E., 271-276
 Cerami, Anthony, 57-59, 532-535
 Chait, Alan, 333-338
 Chan, Catherine B., 536-542
 Chan, Kwok-Ming, 1072-1077
 Chan, Timothy M., 1160-1164
 Chap, Zvi, 984-990
 Chari, S.N., 586-589
 Charlesworth, J.A., 813-818
 Chen, N., 460-463
 Chen, Victor, 1078-1084
 Chen, Y.-D. I., 460-463, 622-626, 643-647
 Cheng, Hong-Ming, 196-199
 Cherksey, Bruce, 499-503
 Chick, William L., 556-561
 Chou, Jesse, 984-990
 Chow, Samson A., 572-575, 888-893
 Chylack, L.T., Jr., 196-199
 Ciognani, Alessandro, 522-526
 Clarke, Basil F., 1025-1027
 Cockburn, E., 235-238
 Cockram, Clive S., 721-727
 Cohen, Margo Panush, 8-12, 604-607, 970-974
 Cohen, R., 762-770
 Coleman, D.L., 26-32
 Colette, Claude, 907-909
 Colle, Eleanor, 801-803
 Collins, V., 1002-1007
 Comacchio, Francesco, 1085-1089
 Cozzuti, Enrico, 522-526
 Crepaldi, Gaetano, 1085-1089
 Crettaz, Marco, 477-485, 794-800
 Creutzfeldt, W., 580-585
 Cruickshanks, K.L., 271-276
 Cushman, Samuel W., 13-18
 Cvet, David, 33-36

D

Danforth, Elliot, Jr., 1144-1149
 Davi, G., 728-731
 Dean, Brian, 450-454
 Debray-Sachs, Monique, 135-140

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
 February, 105-206
 March, 207-304

April, 305-408
 May, 409-504
 June, 505-609

July, 611-708
 August, 709-811
 September, 813-916

October, 917-1018
 November, 1019-1125
 December, 1127-1231

This index covers all reading matter in Volume 33 of Diabetes except the abstracts of papers presented at the 44th Annual Meeting of the American Diabetes Association.

AUTHOR INDEX 1984

De Cosmo, Salvatore, 394-400, 732-737,
1150-1153
De Feo, Pierpaolo, 394-400, 732-737,
1150-1153
DeFronzo, Ralph A., 838-845
Delbridge, L., 745-751
De Pirro, Roberto, 301-304
D'Ercole, A. Joseph, 590-595
Desjeux, Jehan-François, 752-761
Dilworth, Vickie M., 428-434
Ditschuneit, Hans, 285-290
Dodds, W. Jean, 125-129
Doll, Susan C., 244-250
Donald, M.W., 627-633
Dorman, J.S., 271-276
Doman, T.L., 966-969
Douglas, Neil J., 1025-1027
Drash, A.L., 271-276
Draznin, Boris, 339-345
Duckworth, William C., 1062-1067
Duhault, J., 438-443
Dunbar, Joseph C., 978-983
Dyrberg, T., 807-809

E

Ebert, R., 580-585
Eckel, Jürgen, 214-218
Eddlestone, Geoffrey, 1120-1123
Efendić, S., 505-509
Ehrlich, R.M., 995-1001
Eifler, C.W., 86-92
Eisenbarth, George S., 516-521, 700-703,
717-720
Eizirik, Décio L., 383-388
Elahi, Dariush, 950-957
Engerman, Ronald L., 97-100, 846-850
English, Denis, 160-163, 1008-1011
Entman, Mark L., 984-990
Enz, G., 251-257
Erdahl, D.L. Williams, 627-633
Erhardt, G., 277-280
Eriksson, Ulf J., 281-284
Estensen, Richard D., 164-169
Ewing, David J., 1025-1027

F

Fang, Ta-Yun, 219-223
Fang, Victor S., 1112-1119
Farese, Robert V., 648-655
Farese, Robert V., Jr., 648-655
Farkas, Gyula, 1165-1168
Fausto, Aurora, 901-906
Fava, Alessandra, 522-526
Fedele, Domenico, 1085-1089
Feinglos, Mark N., 616-618
Feldman, Felix, 81-85
Ferguson, Duncan C., 1-7
Ferrannini, Eleuterio, 838-845
Field, James B., 984-990
Filler, R.M., 995-1001

Finegood, Diane T., 362-368
Fischer, Lawrence J., 572-575, 888-893
Fleig, Wolfgang E., 285-290
Fletcher, D.J., 170-175
Flückiger, Rudolf, 73-76
Foley, James, 634-642
Folke, M., 944-949
Fong, Bing C., 1078-1084
Formby, Bent, 229-234
Foster, Daniel W., 192-195, 1188-1199
Foster, David, 333-338
Foulkes, J. Gordon, 576-579
Frank, Bruce H., 111-118, 762-770,
1012-1016, 1062-1067
Frank, H.J.L., 1039-1044
Freinkel, Norbert, 281-284, 1028-1038
Frejaville, Elisabetta, 522-526
Froesch, E.R., 790-793
Fujimoto, Wilfrad Y., 119-124, 872-878
Fujita-Yamaguchi, Y., 923-928
Fuks, Abraham, 801-803
Fussgaenger, Rolf, 285-290

G

Gain, Kevin R., 50-56
Galloway, J., 762-770
Ganda, Om P., 516-521, 717-720
Ganguli, S., 864-871
Garberoglio, Carlos, 619-621
García-Estañ, Joaquín, 1127-1132
García-Segura, L.M., 917-922
Gardner, Donald F., 790-793
Gardner, L.I., Jr., 86-92
Garris, David R., 611-615
Gasić, Slobodan, 19-26
Gaskill, S.P., 86-92
Gavin, James R., III, 901-906
Gebhart, Suzanne S.P., 266-270
Geisberg, Mark, 543-547
Gelehrter, Thomas D., 428-434
Gepts, Willy, 101-104, 135-140
Gerich, John E., 184-191, 394-400, 732-
737, 1050-1053
Gertner, Joseph M., 804-806, 1175-1179
Giardina, E., 728-731
Gilden, Janice L., 1112-1119
Gingerich, Ronald L., 901-906
Gishizky, Mikhail L., 556-561
Gjinovci, A., 444-449
Gleason, Ray E., 516-521, 717-720
Goberna, Raimundo, 858-863
Gold, Gerald, 556-561, 1019-1024
Goldfine, Ira D., 64-72, 301-304
Gonzalez, R. Gilberto, 196-199
Goodman, A. David, 125-129
Goodman, William G., 825-831
Goodner, Charles J., 141-152, 153-159
Gorden, Phillip, 421-427
Gordon, Debra A., 910-914
Gottesman, I., 184-191
Granner, Daryl, 328-332
Granner, Mark, 328-332

Grant, A., 1055-1061
Gray, D.W.R., 1055-1061
Gray, R.S., 346-354
Green, Allan, 1045-1050
Greene, Douglas A., 712-716
Griffin, J., 346-354
Grill, V., 505-509
Grodsky, Gerold M., 229-234, 556-561,
1019-1024
Gunnarsson, Rolf, 851-857
Guttmann, Ronald D., 801-803

H

Haffner, S.M., 86-92
Hägglöf, Bruno, 958-965
Hakui, Nobuyoshi, 1200-1202
Hanaoka, Masao, 1051-1054
Handelsman, D.J., 745-751
Hansen, J.A., 966-969
Harano, Y., 415-420
Harrison, Len C., 450-454
Hartley, Craig J., 984-990
Hasling, Claus, 832-837
Hattori, Masakazu, 1051-1054
Hauser, Carl J., 527-531
Hayward, Anthony R., 319-323
Hazuda, H.P., 86-92
Heding, Lise, 832-837
Hedo, Jose A., 13-18
Hegre, Orion D., 975-977
Hellerström, Claes, 464-469, 1028-1038
Henriksson, Jan, 851-857
Henry, R., 762-770
Herberger, Mark, 319-323
Herchuelz, Andre, 464-469
Herold, Kevan C., 1112-1119
Hidaka, Hideki, 305-310
Hii, Charles S.T., 291-296
Hintz, Raymond L., 1175-1179
Hoenig, Margarethe, 1-7
Hollenbeck, C.B., 460-463, 622-626,
643-647
Holmgren, Gösta, 958-965
Hom, Frederick G., 141-152, 153-159
Hori, Mark T., 825-831
Horie, H., 510-515
Horita, Shiro, 176-183
Horton, Edward S., 311-318
Hoskins, Beth, 991-994
Howard, Charles F. Jr., 219-223
Howell, Simon L., 291-296
Hutson, James C., 819-824
Hyslop, Paul A., 258-265

I

Ianuzzo, C. David, 1078-1084
Imura, Hiroo, 1051-1054
Ipp, Eli, 619-621
Ishida, Toshihiko, 984-990
Iwamoto, Yashuhiko, 64-72

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

AUTHOR INDEX 1984

J

Jackson, Fred L., 819-824
 Jackson, Richard A., 700-703, 717-720
 Jacobs, Steven, 923-928
 Jacotot, B., 438-443
 Jaffrin, Michel Y., 752-761
 Jaspán, Jonathan B., 762-770, 1112-1119
 Jefferson, Leonard S., 576-579
 Jialal, Ishwarlal, 794-800
 Johnson, Peter C., 244-250
 Johnson, Robert, 1028-1038
 Jondet, Andre, 135-140
 Jones, A., 1180-1187
 Jones, Richard H., 721-727
 Joó, Ferenc, 1165-1168
 Junger, Kurt D., 1072-1077

K

Kador, P.F., 562-566
 Kahn, C. Ronald, 477-485, 794-800, 923-928
 Kaiser, Fran E., 77-80
 Kaku, Kohel, 495-498
 Kanatsuka, A., 510-515
 Kaneko, Toshio, 495-498
 Kansal, P.C., 389-393
 Karam, John H., 176-183
 Karasic, D., 1039-1044
 Karpen, C.W., 239-243
 Kasanuki, J., 510-515
 Kassoff, Aaron, 125-129
 Kastern, W., 807-809
 Katayama, S., 324-327
 Kawamori, Ryuzo, 1200-1202
 Kawaoi, Akira, 879-887
 Keen, Harry, 686-692
 Keller, U., 738-744
 Kemmer, F., 207-213
 Kern, Timothy S., 97-100, 846-850
 Khatami, Mahin, 785-789
 Kikkawa, R., 415-420
 Kim, Young Tai, 771-777
 King, George L., 794-800
 King, H., 1002-1007
 Kinoshita, J.H., 562-566
 Kitabchi, Abbas E., 681-685, 1133-1137
 Klein, Karen A., 700-703
 Klein, Stanley R., 527-531
 Klenck, Robert E., 1120-1123
 Klimes, Iwar, 305-310, 634-642
 Koch, Stephen, 328-332
 Kohn, Robert R., 57-59
 Kohno, Michiaki, 1051-1054
 Kolterman, O.G., 346-354, 762-770
 Konijnendijk, W., 409-414
 Kosugi, K., 415-420
 Kotowicz, M.A., 813-818
 Koulmanda, Maria, 376-382
 Koyama, Hideki, 879-887
 Krejs, Guenter J., 548-551

Krell, James, 709-711
 Kristensen, L.O., 944-949
 Kryspin-Sørensen, I., 807-809
 Ku, Ling, 604-607, 970-974
 Kuhn, Chris E., 258-265
 Kuhn, Cynthia M., 616-618
 Kuller, L.H., 271-276
 Kumae, Satoko, 879-887
 Kuwabara, T., 562-566
 Kuzuya, Hideshi, 1051-1054

L

Lachkar, Hassan, 907-909
 Lafferty, Kevin J., 975-977
 La Grutta, A., 728-731
 Lambert, Scott R., 421-427
 Lamberton, R. Preston, 125-129
 Landreth, Gary E., 704-708
 Laporte, R.E., 271-276
 Lardinois, C.K., 643-647
 Larson, Ronald E., 648-655
 Lattimer, Sarah A., 712-716
 Lawrence, Susan, 813-818
 Lawson, Edward E., 590-595
 Lawson, J.S., 627-633
 Leahy, J.L., 667-673
 Leavengood, Hanzel, 45-49
 Lebrun, Philippe, 464-469
 Lee, J.B., 324-327
 Lefebvre, P.J., 1169-1174
 Leiter, Edward H., 26-32, 1068-1071
 Leitner, J. Watne, 339-345
 Leme, Carlos E., 455-459
 Leo, Martha M., 552-555
 Lerario, Antonio C., 455-459
 Lernmark, Åke, 224-228, 958-965
 Letemendia, F.J.J., 627-633
 Levine, Allen S., 77-80
 Levy, Joseph, 901-906
 Lewis, Nancy Jo, 281-284, 1028-1038
 Lewis, Robert M., 984-990
 Li, Weiye, 785-789
 Like, Arthur A., 543-547
 Lilly, Frank, 567-571
 Lipson, Loren G., 1120-1123
 Liu, G., 643-647
 Livingston, Elizabeth G., 616-618
 Logothetopoulos, John, 33-36, 93-96
 Lolli, Claudio, 1050-1053
 Long, John P., 888-893
 Ludvigsson, Johnny, 224-228
 Luyckx, A.S., 1169-1174

M

McCubbin, James A., 616-618
 McElduff, Aidan, 421-427, 778-784
 McGarry, J. Denis, 192-195
 MacKay, Peter, 224-228
 MacKenzie, Gerald H., 910-914

MacLaren, Noel K., 435-437
 McLennan, S., 745-751
 McShane, P., 1055-1061
 Madsen, Ole D., 1012-1016
 Madura, Ewa, 33-36
 Makino, H., 510-515
 Malaisse, Willy J., 464-469
 Malaisse-Lagae, Francine, 464-469
 Malone, John I., 45-49
 Mandarino, L., 184-191
 Mandel, T.E., 376-382
 Marcus-Samuels, Bernice, 778-784
 Maron, Ruth, 923-928
 Marquié, G., 438-443
 Martin, Diego R., 93-96
 Martini, Alessandro, 1085-1089
 Mascardo, Renato N., 1099-1105
 Massi Benedetti, M., 732-737
 Matschinsky, Franz M., 1-7
 Matsutani, Akira, 495-498
 May, J.M., 170-175
 Mayer, J. Heidi, 470-476
 Mazzone, Theodore, 333-338
 Mehlinger, C. Mark, 527-531
 Meli, F., 728-731
 Merimee, Thomas J., 125-129, 790-793
 Metz, Stewart A., 119-124, 872-878
 Migliorini, Renato H., 383-388
 Miller, J.D., 864-871
 Miras Portugal, Maria Teresa, 1127-1132
 Mirouze, Jacques, 907-909
 Misbin, Robert I., 355-361, 1045-1050
 Miwa, Koichi, 401-404
 Miyazaki, Itsuo, 401-404
 Molina, Joseph M., 1120-1123
 Molinari, Giorgio, 1085-1089
 Monga, T.N., 627-633
 Monnier, Louis H., 907-909
 Monnier, Vincent M., 57-59
 Mooradian, Arshag D., 77-80
 Moossa, A. Rahim, 619-621, 1112-1119
 Mordes, John P., 543-547
 Morgan, Carl R., 611-615
 Moriarty, Richard J., 470-476
 Morishima, T., 207-213
 Morley, John E., 77-80
 Morris, Mary Ann, 516-521
 Morris, P.J., 1055-1061
 Muller, Denis C., 950-957
 Muñoz, Andres, 1127-1132
 Murphy, Robert C., 119-124

N

Nagafuchi, Seiho, 894-900
 Nagulesparan, Murugasu, 305-310, 634-642
 Nakamura, Minoru, 894-900
 Nakamura, Mitsuo, 879-887
 Nakano, T., 415-420
 Namba, Yujiro, 1051-1054
 Nath, N., 586-589
 Nawabi, Ismat, 81-85

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
 February, 105-206
 March, 207-304

April, 305-408
 May, 409-504
 June, 505-609

July, 611-708
 August, 709-811
 September, 813-916

October, 917-1018
 November, 1019-1125
 December, 1127-1231

AUTHOR INDEX 1984

Neave, Charles, 656-660
Negrin, Paolo, 1085-1089
Nestler, John E., 266-270
Neufeld, Michel, 435-437
Newgard, Christopher B., 192-195
Ng, A.B.P., 1180-1187
Nielsen, Ole Hother, 832-837
Nishimori, T., 415-420
Noether-Fleig, Gaby, 285-290
Norman, A.W., 917-922
Nowlain, Robert M., 1019-1024
Nowotny, Peter, 19-25
Nyfeler, Fritz, 1008-1011
Nylén, A., 505-509

O

O'Brien, Mark M., 45-49
O'Dea, Kerin, 596-603
O'Dorisio, T.M., 239-243
Ohshima, Kihachi, 1160-1164
Okamoto, Hiroshi, 401-404
Okamoto, Motozumi, 1051-1054
Oldham, Susan B., 1120-1123
Olefsky, J.M., 111-118, 346-354, 762-770
Olsson, Yngve, 1090-1098
Ono, Junko, 879-887
Orchard, T.J., 271-276
Orci, L., 917-922
Orsetti, Andre, 907-909
Osegawa, N., 510-515
Ostenson, C.-G., 505-509
Ostman, Jan, 369-375, 851-857
Owerbach, David, 958-965
Ozand, Pinar T., 435-437

P

Pacini, Giovanni, 362-368
Page, Michael G., 45-49
Palmer, J.P., 966-969
Panganamala, R.V., 239-243
Pargeter, K., 1002-1007
Pasma, A., 409-413
Patel, D.G., 661-666, 1127-1132
Peavy, Daniel E., 1062-1067
Pederson, Raymond A., 536-542
Pek, Sumer Belbez, 929-936
Peluso, Ivana, 450-454
Perlman, K., 995-1001
Perriello, Gabriele, 394-400, 732-737, 1150-1153
Peterson, Michael J., 45-49
Pilkis, Simon J., 1008-1011
Pipeleers, D.G., 101-104
Pirazzoli, Piero, 522-526
Pizzolato, G.P., 917-922
Podlecki, D.A., 111-118
Polonsky, Kenneth S., 486-494, 762-779, 1112-1119

Posner, Norman A., 81-85
Pou, José, 1019-1024
Premdas, Francis H., 1120-1123
Press, C. Martin, 804-806, 1175-1179
Prudhomme, Gerald J., 801-803
Pussell, B.A., 813-818

Q

Quesada, Tomás, 1127-1132

R

Rabin, Bruce S., 709-711
Rabinovitch, Alexander, 224-228
Radziuk, J., 207-213
Raghu, P.K., 966-969
Ramírez, Remedios, 858-863
Rao, P.G., 251-257
Raper, L.R., 1002-1007
Rathi, A.B., 586-589
Ravussin, Eric, 311-318
Reach, Gérard, 752-761
Reaven, G.M., 460-463, 622-626, 634-642, 643-647
Reeve, T., 745-751
Reinauer, Hans, 214-218
Relethford, J.H., 86-92
Renold, A.E., 444-449
Revers, R.R., 762-770
Reyman, Theodore A., 910-914
Richard, Jean L., 907-909
Richelsen, Bjorn, 832-837
Richter, Harry, 619-621
Riley, William J., 435-437
Rivier, Jean, 804-806
Robbins, David C., 311-318, 1144-1149
Rockey, John H., 785-789
Rodbard, Helena W., 455-459
Rossetti, Luciano, 301-304
Rossini, Aldo A., 543-547
Roth, Jesse, 421-427
Roth, Richard A., 64-72, 301-304
Rubenstein, Arthur H., 486-494, 619-621, 762-770
Rubin, Cheryl L., 125-129
Rubin, Harry, 81-85

S

Saba, Thomas M., 125-129
Sabir, Mohammad Ayb, 648-655
Sai, Pierre, 135
Salardi, Silvana, 516-526
Sanchez-Pescador, Ray, 297-300
Sandler, S., 937-943
Santeusano, Fausto, 394-400, 732-737
Santiago, Julio V., 60-63, 1133-1137
Sarson, D.L., 389-393
Sauerheber, Richard D., 258-265

Scarlett, J.A., 346-354
Schaffer, Stephen W., 1138-1143
Scheidegger, Karl, 1144-1149
Schmeiser, L., 762-770
Schmid-Formby, Florence, 229-234
Schöller, J., 807-809
Schroer, Joyce A., 778-784
Schwartz, Robert, 656-660
Schwizer, R.W., 26-32
Scott, Jennifer M., 991-994
Sefton, Michael V., 674-680
Sehgal, Prabhat, 656-660
Seidman, J.G., 700-703
Selawry, Helena P., 405-406
Sener, Abdullah, 464-469
Serrano, Concepción, 1127-1132
Sestoft, L., 944-949
Shapiro, Colin M., 1025-1027
Shapiro, G., 346-354
Shargill, Narinder S., 1160-1164
Shen, Shuyu, 785-789
Sherline, Peter, 1099-1105
Sherwin, Robert S., 804-806, 1175-1179
Shichiri, Motoaki, 1200-1202
Shigeta, Y., 415-420
Shin, Seung-II, 105-110, 567-571
Shoemaker, William C., 527-531
Shows, Thomas B., 200-202
Shreve, Paul D., 428-434
Siesjö, Bo K., 1090-1098
Simaoka, K., 324-327
Simeonovic, Charmaine J., 975-977
Simonson, Donald C., 838-845
Simpson, Ian A., 13-18
Sims, Ethan A.H., 311-318
Singer, Don B., 656-660
Sinha, M.K., 864-871
Skor, Donald A., 60-63
Slavin, Shimon, 543-547
Slonim, Alfred E., 160-163
Smith, Douglas, 838-845
Smith, Phillip H., 661-666
Soeldner, J. Stuart, 516-521, 717-720
Sonksen, Peter H., 721-727
Sørensen, Niels Schwartz, 832-837
Sperling, M.A., 864-871
Spielman, Richard S., 552-555
Spitzer, John J., 1078-1084
Srikanta, S., 516-521, 717-720
Starke, A.A.R., 277-280
Stauffer, W., 738-744
Stefanushyn, Nicholas I., 81-85
Steffes, Michael W., 164-169
Steinberg, Carl, 771-777
Steinberg, Jay P., 339-345
Steinbrecher, Urs P., 130-134
Steiner, Donald F., 1012-1016
Stentz, Frankie B., 681-685, 1133-1137
Stern, M.P., 86-92
Stöckmann, F., 580-585
Strano, A., 728-731
Suchy, F.J., 864-871
Surma, Maria Linda, 8-12
Surrige, D.H.C., 627-633

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE

January, 1-104
February, 105-206
March, 207-304

April, 305-408
May, 409-504
June, 505-609

July, 611-708
August, 709-811
September, 813-916

October, 917-1018
November, 1019-1125
December, 1127-1231

AUTHOR INDEX 1984

Surwit, Richard S., 616-618
 Susa, John B., 656-660
 Sussman, Karl F., 339-345
 Suzuki, M., 415-420
 Suzuki, T., 510-515
 Swenne, Ingemar, 1028-1038

T

Tager, Howard S., 693-699
 Takaki, Ryosaburo, 879-887, 894-900
 Takashima, Toru, 401-404
 Tamborlane, William V., 804-806, 1175-1179
 Tan, Boen Hie, 1138-1143
 Taniguchi, Y., 415-420
 Tassoni, Paola, 522-526
 Taylor, Simeon I., 421-427, 778-784
 Thomas, Lorraine, 60-63
 Thorne, Michael O., 804-806
 Tobin, Jordan D., 950-957
 Toledo e Souza, Iracelia T., 455-459
 Toledo-Pereyra, Luis H., 910-914
 Tomlinson, David R., 470-476
 Treble, Donald H., 125-129
 Trent, D.F., 170-175
 Treutelaar, Mary K., 704-708
 Tricolik, James V., 200-202
 Trimble, E.R., 444-449
 Triolo, G., 728-731
 Trudeau, Walter L., III, 648-655
 Tsai, Michael Y., 1133-1137
 Tsuruoka, Y., 415-420
 Tubesing, Karen B., 536-542
 Tuch, B.E., 1180-1187
 Tung, A.K., 235-238
 Turtle, John R., 745-751, 1106-1111, 1180-1187

U

Underwood, Louis E., 590-595
 Unger, Roger H., 305-310, 435-437, 634-642

V

Vale, Wylie, 804-806
 Valiquette, Nancy, 33-36
 Van De Werve, G., 944-949
 Vasquez, Barbara, 305-310, 634-642
 Veld, P.A. in't, 101-104
 Ventura, Maria Rosa M., 394-400, 732-737, 1150-1153
 Verdin, E., 1169-1174
 Viberti, Giancarlo, 686-692
 Virji, Mohamed A., 164-169
 Vlassara, Helen, 532-535
 Vranic, M., 207-213

W

Wagener, D.K., 271-276
 Wagman, Lawrence D., 421-427
 Wahren, John, 851-857
 Wajchenberg, Bernardo L., 455-459
 Waldhäusl, Werner K., 19-25
 Wallberg-Henriksson, Harriet, 851-857
 Walsh, Mary F., 929-936, 978-983
 Watts, Colin, 50-56
 Weiner, Myron, 37-44
 Weir, G.C., 170-175, 444-449
 Weiss, M., 738-744
 Welsh, Michael, 464-469, 937-943
 Wennlund, Anders, 369-375
 Weur, G.C., 667-673
 White, Neil H., 60-63, 1133-1137

Whitehead, Dan S., 611-615
 Whitley, Chester B., 1133-1137
 Whittington, Karen, 405-406
 Wiegman, J.B., 409-413
 Williams, John A., 64-72
 Williams, Paul F., 1106-1111
 Wilson, Glenn L., 1138-1143
 Winter, William E., 435-437
 Witzum, Joseph L., 130-134
 Woda, Bruce A., 543-547
 Wolf, Jcyce, 567-571
 Wolfe, Robert R., 311-318
 Wolters, G.H.J., 409-413
 Wong, K.Y., 64-72
 Wood, S.M., 389-393
 Woodtli, Thomas, 73-76
 Wooten, V., 324-327

Y

Yajima, Y., 562-566
 Yamada, Kazunori, 1051-1054
 Yamaguchi, Keisuke, 894-900
 Yamamoto, Hiroshi, 401-404
 Yamasaki, Yoshimitsu, 1200-1202
 Yasuda, H., 415-420
 Yokogawa, Yasushi, 879-887
 Yokono, Koichi, 64-72
 Yonemura, Yutaka, 401-404
 Yoshida, S., 510-515
 Yoshimasa, Yasunao, 1051-1054
 Yue, D.K., 745-751

Z

Zapf, J., 790-793
 Zeller, W. Patrick, 656-660
 Zier, Karen S., 552-555
 Zimmermann, H., 277-280
 Zimmet, P., 1002-1007

January, 1-104
 February, 105-206
 March, 207-304

DIABETES: VOLUME 33 (1984) PAGE NUMBERS BY ISSUE
 April, 305-408
 May, 409-504
 June, 505-609
 July, 611-708
 August, 709-811
 September, 813-916

October, 917-1018
 November, 1019-1125
 December, 1127-1231